ACCELERATED COLLEGE PREPARATION: EXAMINING MIDDLE COLLEGE HIGH SCHOOL ALUMNI PERCEPTION OF THEIR COLLEGE READINESS AND TRANSITION TO COLLEGE

BY

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DISSERTATION

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ABSTRACT

The purpose of this pilot sequential explanatory mixed method design was to contribute to closing the void in the literature by exploring the educational outcomes of 45 Northern California MCHS Alumni and their perceptions of their college readiness and transition to college. By integrating quantitative and qualitative findings, results show that participants felt academically prepared for college, but were not comprehensively prepared for the college context. Findings from this dissertation study inform programmatic efforts structured to increase the enrollment, persistence and degree completion of traditionally underrepresented students that participate in MCHS-ECHS. More importantly, the results have larger implications for increasing student academic success of traditionally underrepresented students in traditional public high school by utilizing a "culturally responsive approach to college readiness (Welton & Martinez, 2013, p. 1).

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Chapter 1

Introduction

Regrettably, the transition from high school to college is a challenging task for many traditionally underrepresented students, particularly students of color, low-income students, and students that are the first in their family to attend college (Bailey, Hughes, & Karp, 2002; McDonough, 2005; Pascarella, Pierson, Wolniak, & Terenzini, 2004). The challenges are grounded in historical and contemporary forms of discrimination and educational inequity, which systematically exclude the above-mentioned populations from gaining access to equitable educational resources (Hamrick & Stage, 2004; McDonough, 2005). Consequently, students of color, low-income students, and first-generation college students are more likely than their counterparts to be underprepared for college-level work and lack the necessary college knowledge needed to navigate the educational pipeline (Cooper & Liou, 2007; Engle, 2007; McDonough, 2005; NCES, 2001; Pascarella et al., 2004; Ward & Vargas, 2011).

As a result, reoccurring issues of access to academic resources unavoidably perpetuate educational inequality and cause differentiation in educational outcomes by student background (McDonough, 2005; Trent, Orr, Ranis, & Holdaway, 2007). For that reason, there is increased effort to create access to educational opportunities for traditionally underrepresented students earlier along the educational pathway (Wimberly & Noeth, 2005). Education reform at the secondary level in particular calls for a significant transformation of high schools in order to ensure adequate academic preparation for traditionally underrepresented students, with the goal of increasing their odds of enrolling and succeeding in college (Martinez & Klopott, 2003; Venezia & Jaeger, 2013).

This work focused on an educational reform option that has grown substantially since its inception: Middle College High School (MCHS). The concept of MCHS was developed in the early 1970s and is structured to raise high school graduation rates and college enrollment rates of traditionally underrepresented students (Lieberman, 2004). It is a unique secondary/postsecondary partnership that places high schools on or near a 2-year or 4-year college campus and allows high school students the opportunity to take college classes as early as ninth grade (Lieberman, 2004; Spence & Barnett, 2007; Wechsler, 2001). Now also commonly known as the Early College High School Initiative (Lieberman, 2004), this college readiness model has gained popularity and is viewed as a catalyst for addressing structural issues impacting the high school to college pipeline for traditionally underrepresented by providing student's access to college readiness opportunities.

Statement of the Problem

Middle College High School-Early College High School (MCHS-ECHS) is identified as a program that serves as a medium to higher education by making college affordable and accessible to students who have been traditionally underrepresented in education. However, whether or not students experience the long-term benefit from participating in this program model is not significantly substantiated. This is due to the fact that MCHS-ECHS structural variation across states methodologically limits researchers' capacity to examine the impact MCHS-ECHS has on student matriculation and postsecondary degree completion on a national scale (Berger et al., 2014**;** Woodcock & Beal, 2013). In addition, a review of the literature reveals there is limited qualitative research that privileges the voices of students that participate or have participated in MCHS-ECHS. For this reason, studies that examine MCHS-ECHS student perception of their college readiness process are limited as well. Thus there lacks a

critical assessment of what it means to be college ready from a MCHS-ECHS student perspective through a quantitative and qualitative epistemological framework.

Purpose of the Study

The purpose of this dissertation is to examine a group of Northern California MCHS alumni educational outcomes as well as their perception of the college readiness process. Additionally, Northern California MCHS alumni educational experiences are used to critique the notion of college readiness. Research on MCHS-ECHS and its role as a college readiness model will illuminate programmatic efforts that are structured specifically to increase the academic success of traditionally underrepresented student populations. The study presented here fills the void in the research literature by offering supplemental data on the educational outcomes of a group of Northern California MCHS alumni after high school. This study also presents new data that shed light on how Northern California MCHS alumni perceive their college readiness experience and relative support structures as attributing or not attributing to their academic success.

Theoretical Considerations

Four major theories commonly utilized to examine college readiness and access to higher education—David Conley's comprehensive college readiness framework, social capital theory, social network theory, and cultural capital—serve as the theoretical frameworks that guide this study. The abovementioned frameworks are briefly introduced in the following section and further discussed in the literature review in chapter 2.

College readiness. David Conley (2007) operationally defines college readiness as "the level of preparation a student needs in order to enroll and succeed—without remediation—in credit-bearing general education courses at a postsecondary institution" (p. 5). Conley

incorporates various attributes of college readiness processes into his conceptual model. According to Conley (2007), a student who is ready for college should use key cognitive strategies, have knowledge in key content areas and skills, display certain academic behaviors, and have some level of contextual skills and awareness. While Conley's (2007) model is not a one-size-fits-all model (Welton & Martinez, 2013) or a definitive framework for college readiness, it provides a lens to analyze how students prepare for college from a comprehensive point of view.

Social capital and Social network theory. The steps needed to become college ready very much depend on gaining access to academic resources. As such, it is particularly vital to take into consideration the type of networks, supports, and relationships Northern California MCHS alumni have access to that introduced them to their college readiness experience. As such, social network theory and social capital theory also serve as frameworks to understanding findings that explore what resources initially connected students to Northern California MCHS and how those resources shaped alumni college readiness and transition into postsecondary institutions.

I used social network theory to examine and map out the relationships and structures that are in place that provided Northern California MCHS alumni access to college readiness resources. Social capital theory is complex in that it is multi-dimensional and serves as a lens to explore the collective benefits accumulated via social networks, which includes but is not limited to benefits and resources accumulated through individual interaction via groups and communities (Coleman, 1988; Lin, 1999a, 1999b). I used a social capital lens to put into perspective the resources MCHS-ECHS alumni accumulate as a result of social interaction with groups.

Cultural capital. The concept of cultural capital also serves as a guiding framework for this study. Cultural capital was introduced by Pierre Bourdieu (1986) and is commonly defined as an individual's familiarity and ability to navigate "dominant culture in society" (Sullivan, 2001, p. 3). Knowledge regarding dominant culture tends to be passed down via high-status families, and therefore the underlying meaning behind cultural capital is problematic. However, cultural capital, although not undergirded in one of the four listed research question questions subsequently presented, it is a theoretical framework that allowed me to examine the way in which MCHS-ECHS alumni are provided or lack information pertaining to navigating the educational pipeline to higher education.

Research Questions

Utilizing a college readiness, social capital lens, social network theory and cultural capital lens, this work addresses the following research questions:

Quantitative Phase

1.) What are the educational outcomes of Northern California MCHS alumni?
2.) How do Northern California MCHS alumni perceive their college preparation for 4-year universities?

Qualitative Phase

1.) What does it mean to be college ready for Northern California MCHS alumni?
2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?

Delimitations

There are several delimitations included in this work. The delimitations are as follows.

1. This study was confined to the educational experiences of a group of Northern California MCHS alumni who have graduated and/or are currently in college.
2. The high school referenced in this work is a MCHS-ECHS in Northern California, referred to as Northern California MCHS.
3. Participants' responses are confined to their reflections of their experience at Northern California MCHS.
4. The goal of the study is to examine Northern California MCHS alumni college readiness after participants transitioned into and graduated from a 4-year college, therefore Northern California MCHS alumni who did not transfer to college were not included in this study.

Limitations

The limitations of the study are as follows.

1. Facebook served as a critical access point to recruit alumni. However, Facebook limited the amount of recruitment emails that could be sent at a given time. For this reason, only 45 Northern California MCHS alumni were included in this study.
2. Data are collected from a purposeful sample of Northern California MCHS alumni. Therefore, quantitative results are not generalizable.
3. The nominal literature available that speaks to the impact of MCHS-ECHS on student academic achievement is published by research organizations that are funded by partnering organizations that financially and administratively support the Early College High School national initiative. Therefore, review of relevant

research on MCHS-ECHS may be one directional and lack critique of the MCHS-ECHS model.

Overview of Methodological Approach: Sequential Explanatory Mixed Methodology

In regards to the methodological approach, this dissertation makes use of a sequential explanatory mixed method epistemological inquiry, combining both quantitative and qualitative methodological strands (Creswell, Hanson, Plano, & Morales, 2007). The quantitative phase consists of descriptive data that inform the larger inquisition of educational outcomes of MCHS-ECHS alumni who are currently in or have graduated from postsecondary institutions. In addition, survey data are collected from 45 Northern California MCHS alumni in order to gain a broad understanding of their perception of whether Northern California MCHS played a role in their college preparation. The qualitative phase is comprised of in-depth interview data gathered through an interpretative phenomenological approach that privileges the voices of a sub-sample of the survey respondents, which includes 11 Northern California MCHS alumni. The purpose of the qualitative phase was to augment quantitative findings and provide a thorough understanding of Northern California MCHS alumni educational experiences and their perception of academic successes or failures. By the end of this dissertation, readers will have a comprehensive understanding of what it means to be a Northern California MCHS student, how Northern California MCHS is experienced from a student perspective, and how Northern California MCHS is perceived as a catalyst to addressing the high school to college pipeline.

Significance of the Study

College-going rates have increased substantially over time (Ross et al. 2012). However, college enrollment does not equate to college preparedness. The problem still remains that students of color, low-income students, and first-generation college students have lower rates of

college enrollment and are less academically prepared for college level work. If MCHS-ECHS is viewed as an alternative program that boosts the enrollment, persistence, and degree completion of traditionally underrepresented students, it is imperative to produce research that informs college readiness policy and programs that are geared toward enhancing educational opportunities for traditionally underrepresented students.

This study is significant because it provides a holistic understanding of college readiness and describes how to best implement educational practices geared toward increasing student academic trajectory for traditionally underrepresented populations. Particularly, the voices of a group of MCHS-ECHS alumni are brought to the forefront to better comprehend their perception of their college readiness. Allowing students the opportunity to provide insight to their college preparation process makes for an in-depth understanding of Northern California MCHS student educational outcomes and what it means to be college ready. Given the increasing efforts to improve college readiness for traditionally underrepresented students in education, it becomes essential to investigate factors that influence students' high school completion, as well as entrance and enrollment in postsecondary institutions. Therefore, examining an educational alternative, particularly MCHS-ECHS and MCHS-ECHS student perception of their experience, allows researchers and policymakers to identify what resources possibly work in assisting students pursue higher education.

Dissertation Organization

This dissertation is organized around seven chapters. Chapter 1 consists of the introduction to the study, which includes the background, purpose, research questions, and significance. Chapter 2 is a review of literature that explores the underlying causes of differentiation in educational outcomes by student background, history of MCHS-ECHS, the

methods researchers use to examine college readiness, and how MCHS-ECHS is evaluated as a college readiness model. In addition, Conley's (2007) comprehensive college readiness model, social network theory, and social capital theory are explored in greater detail as lenses to understand the research findings at the conclusion of this study. At the end of chapter 2, I discuss the gaps in literature and explain how this dissertation will contribute to what is unknown about college readiness outcomes for traditionally underserved students, particularly college readiness outcomes of MCHS-ECHS alumni and their perception of their college readiness process. Chapter 3 describes the methodological approach, sequential explanatory mixed methodology, followed by a description of the data collection and data analysis process for the quantitative and qualitative strands employed in this study. In chapter 4, I present the quantitative data collection, data analysis, and research findings. In chapter 5, I address the qualitative data collection, data analysis, and findings. In chapter 6, I integrate both quantitative and qualitative data and discuss the summary of research findings. Finally, in chapter 7, I cover the contribution of the study in addition to the implications and conclusions.

Chapter 2

Review of Literature

The review of relevant literature begins with a contextualization as to why there is a need for a program like Middle College High School-Early College High School (MCHS-ECHS) by introducing meaningful discourse centered on issues of access to educational resources for traditionally underrepresented students and ways to mitigate or eliminate barriers to educational opportunity. The review of literature is divided into the following sections:

1. Barriers along the educational pipeline
2. An overview of differentiation in educational outcomes by student background characteristics
3. The history of the Middle College High School concept and its expansion into the Early College High School Initiative
4. Literature pertaining to MCHS-ECHS
5. The gaps in literature
6. A discussion of David Conley's comprehensive college readiness framework and social capital theory

Differentiation in educational outcomes is presented to provide an overview of the gap in academic achievement by racial/ethnic category and socioeconomic background in order to illuminate the achievement gap that remains a persistent problem in U.S. education. Barriers impacting the educational pipeline will put into context institutional and societal hurdles that undermine the high school to college transition for traditionally underrepresented students. Thereafter, the history of the Middle College High School concept and Early College High School Initiative is introduced as an educational reform model that serves as a catalyst to

addressing differentiation in educational outcomes and improving the high school to college pipeline for traditionally underrepresented students. Subsequently, literature on MCHS-ECHS will bring to the forefront what is currently known about the impact of MCHS-ECHS on the educational attainment for traditionally underrepresented groups.

Next, I provide an overview explaining how this study fills the gaps in literature by utilizing a mixed method retrospective approach to understand the educational outcomes of MCHS alumni, their perception of their college readiness and their transition to college through a comprehensive college readiness conceptual framework and social capital lens. As such, a review of David Conley's (2007) comprehensive conceptual college readiness framework discourse is presented as a theoretical lens to understand ways in which educational resources and practices are employed as tools that facilitate the student college readiness process. The theoretical portion of the review of literature will also include a discussion of how researchers examine college readiness in order to provide a better understanding of why college readiness should be examined from a comprehensive lens. Finally, I discuss literature on social capital theory and social network theory, including how it conceptualizes ways in which supports, relationships, and networks facilitate access to educational opportunities for MCHS-ECHS students.

Barriers Along the Educational Pipeline

The educational pipeline is a conceptual blueprint of processes that should be completed, resulting in high school completion, college enrollment, college persistence, college completion, and entry into the workforce (Cabrera & La Nasa, 2000; Horn & Carroll, 1997). The educational pipeline not only consists of recognized stages that should be completed in order to transition

into higher education but also includes educational resources that if accessed are critical in helping students navigate their path to higher education.

Sets of resources along the educational pipeline that are considered critical in assisting students in the pursuit of higher education include but are not limited to attainment of a high school diploma, access to a college preparatory curriculum, access to knowledge pertaining to college admission and processes, assistance in applying to college, college counseling, parent involvement, financial aid, social networks, college culture, and social support (Adelman, 1999; Alvarez & Mehan, 2006; Cabrera & La Nasa, 2000; Choy, Horn, Nuñez, & Chen, 2000; Farmer-Hinton & Adams, 2006; Farmer-Hinton & McCullough, 2008; Holcomb-McCoy, 2010; Martinez & Klopott, 20053**;** Perna & Titus, 2005). Researchers also recognize that at the secondary institutional level, several steps must be taken to ensure staff create and are committed to a space that fosters the ideology that all students can succeed and attend college; this is often referred to as establishing a college-going culture (Holland & Farmer-Hinton, 2009; McClafferty, McDonough, & Nunez, 2002). A college-going culture includes the incorporation of educational policy, support, and programs that are structured to increase student academic success.

Unfortunately, navigating the educational pipeline and tapping into resources that will allow students the opportunity to enhance their academic success in order to matriculate into college is easier theorized than achieved. Undesirably, the educational pipeline is referred to as a "leaky pipeline" (Hernandez & Lopez, 2004; Hoffman, 2003) that represents a pathway where differentiation in educational outcomes is caused by issues of accessing educational resources that are undeniably related to "individual and family attributes and conditions, institutional structures, [as well as] cultural and economic forces" (Trent, Orr, Ranis, & Holdway, 2007, p. 2208). Consequently, instead of a direct path to higher education, barriers that are systematically

embedded along the educational pipeline create what Kuh, Kinzie, Buckley, Bridges, and Hayek (2006) identify as a "wide path with twists, turns, detours, roundabouts, and occasional dead ends that many students may encounter during their educational career" (p. 7). Even if not a dead end, disparity in educational attainment as a result of a "leaky pipeline" is without a doubt an unwelcomed result.

Differentiation in Educational Outcomes

Systematic barriers (i.e., funding, poverty, academic tracking, access to college counseling, social support, accountability, etc.) unquestionably play a role in student educational outcomes and unapologetically impact students of color, students from lower-SES backgrounds, and first-generation college students (Kao & Thompson, 2003) As such, although high school completion, college enrollment, and postsecondary degree attainment have increased over time for all racial/ethnic groups and students from various socioeconomic backgrounds, the achievement gap remains prevalent (Ross et al. 2012). Gloria Ladson-Billings (2006) insinuates this gap in academic achievement is "one of the most talked-about issues in U.S. education" (p. 3). As a result, the disparity in educational attainment by factors such as racial/ethnic category, status as a first-generation college student, and SES status continues to receive considerable attention (Trent et al., 2007). This is of great importance considering differentiation in educational attainment by race/ethnic category and SES status contributes to the perpetuation of economic and social stratification in U.S. society (Perna, 2007).

***Racial/ethnic disparity*.** One criterion of college enrollment is centered on the intensity of a student's high school curriculum. Scholars contend that in regards to academic preparation, a rigorous high school curriculum, specifically in regards to academic intensity and academic quality, is a key indicator of college enrollment and degree attainment (Adelman, 1999; Engle &

Tinto, 2008; Perna, 2005). According to Horn, Kojaku, and Carroll (2001) and Nord et. al (2011), a rigorous curriculum is the most challenging curriculum that contains standard, midlevel, and rigorous course requirements and includes 4 years of English, 3 years of a foreign language, 3 years of social studies, 4 years of mathematics (including pre-calculus or higher), 3 years of science (including biology, chemistry, physics), and at least one Advanced Placement (AP) course or test. Additionally, academic rigor not only is an indication of academic achievement (Martinez & Klopott, 2003) but also determines college selectivity (Horn et al., 2001; Horn & Nuñez, 2000). For example, utilizing data from the1995-1996 Beginning Postsecondary Student Study, Horn et al. (2001) found that "71 percent of students who completed rigorous curricula enrolled in a selective college or university, compared with 40 percent who completed mid-level curricula and 32 percent who completed core curricula or lower" (p. iv). Thus revealing students that have the opportunity to partake in advanced curriculum positively benefits.

For that reason, it is apparent that the intensity of a student's high school curriculum has academic advantages. Disappointingly, not all students complete a rigorous curriculum at the same rate. Research indicates that Asian and White students have a higher percentage of completing a rigorous curriculum in comparison to their African American and Hispanic counterparts (Nord et al., 2011). Utilizing data from the 2009 High School Transcript Study, Nord et al. (2011) found that the percentage for rigorous curriculum completion for Asian and Pacific Islanders was 29%, White students 14%, Hispanic students 8%, and African American students 6%. In addition, an examination of grade point average (GPA), another indicator utilized to determine a student's level of college readiness and academic success, reveals that in

2009, Asian and White students had a higher GPA than their African American and Hispanic counterparts (3.26 and 3.09 vs. 2.69 and 2.84, respectively) (Nord et al., 2011).

Continuing along the same lines of academic preparation, Perna (2000) also examined factors that impacted African American, Hispanic, and White students' decision to attend college. Within her established statistical model of decision to enroll in a four-year university, academic ability is considered. In Perna's (2000) study, academic ability includes test score and completion of academic curriculum. Utilizing data from the third follow-up to the National Educational Longitudinal Study (NELS) in 1994, Perna (2000) found that African American and Hispanic students had lower academic ability in comparison to their White counterparts. Particularly finding that "average test scores are lower for African Americans and Hispanics than for Whites (45.1, 47.7, and 53.1)" (p. 129). In addition, Perna (2000) found that African Americans and Hispanic students have lower participation rates in academic curricular programs in comparison to their White counterparts (37%, 33%, and 46%, respectively).

Regrettably, disparity in educational attainment does not stop at academic preparation and continues to plague the educational pipeline. The National Center for Education Statistics' Higher Education: Gaps in Access and Persistence Study by Ross et. al (2012) provides data in regards to educational outcomes by racial/ethnic category and found that disparities exist. In 2008 and 2009, difference in averaged freshman graduation rates (AFGR) reveals that African American and Hispanic students had a lower rate of graduating on time with a regular diploma compared to their Asian and White counterparts (63% and 65% vs. 90% and 81%, respectively). When examining postsecondary enrollment in 4-year institutions, in 2004 African Americans and Hispanic students had a lower attendance rate compared to their Asian and White counterparts (44% and 29% vs. 61% and 52%, respectively). Analogous to the differentiation in

high school completion and college enrollment by racial/ethnic category is postsecondary degree completion. For the 2004 cohort, regardless of degree completion in 4 years, 5 years, or 6 years, African American and Hispanic students had a lower postsecondary degree completion rate compared to their Asian and White counterparts (Ross et. al, 2012).

Socioeconomic Disparity. Similar findings hold true for students from low-socioeconomic (low-SES) backgrounds compared to their middle- and upper-class counterparts. In particular, literature reveals that students from low-SES backgrounds are at a great disadvantage (Engle & Tinto, 2008; Jacobson & Mokher, 2009; Terenzini, Cabrera, & Bernal, 2001). Notably, students from low-SES backgrounds lack the academic preparation needed to enroll in college, receive less financial support for college, and have a lower college enrollment compared to their middle- and upper-class counterparts (Engle & Tinto, 2008). Even when students from low-SES backgrounds enroll in college, they tend to work more hours while in college, attend part-time, and be "less likely to be engaged in academic and social experiences that foster college success" (Engle & Tinto, 2008, p. 3).

One of many referenced examples that illuminate the disparity in educational outcomes of low-income students in comparison to their non low-income counterparts is shown in Cabrera and La Nasa's (2000) work. In particularly, Cabrera and La Nasa (2000) found that students from low-SES backgrounds have lower college enrollment compared to their middle and upper-SES counterparts and are less likely to complete college qualifications that are considered critical for college enrollment. Using National Educational Data of 1988 and taking into consideration family income background, Cabrera and La Nasa (2000) found that of 1,000 eighth grade students in the sample who came from low-SES backgrounds, "only 285, less than one-third, secured some degree of college qualifications by the end of their senior year" (p. 34), compared

to their upper-SES counterparts in which more than two-thirds secured college qualifications by their senior year. In regards to developing college plans and applying to college, a lower percentage of students from low-SES backgrounds develop a college plan and apply to college compared to their upper-SES counterparts (Cabrera & La Nasa, 2000).

Similarly, Aud, Hussar, Johnson, Kena, Roth, Manning, Wang, and Zhang (2012) found disparity in educational attainment in regards to student SES background. Utilizing current population survey data, Aud et al. (2012) found that high school completers from low- and middle-SES backgrounds had a lower immediate college enrollment (in 2-year and 4-year institutions) compared to high school completers from upper-SES family backgrounds. High school completers from low-SES backgrounds had an immediate enrollment rate of 52%, middle-SES high school completers 67%, and upper-SES high school completers 84%.

First-generation college students. Regarding first-generation college students, students who are traditionally the first in their family to attend college (Engle & Tinto, 2008) and who also represent a population that have parents with an educational level no higher than high school (Pascarella et al., 2004), are also at a disadvantage. Researchers reveal that first-generation college students are more likely to be non-native English speakers (Engle & Tinto, 2008), ethnic minorities, and from low-SES backgrounds (Bui, 2002; Lohfink & Paulsen, 2005). As such, the aforementioned disparity in access and educational outcomes by racial/ethnic and SES category regrettably encompasses the experiences and institutional challenges faced by first-generation college students. Within literature it is demonstrated that first-generation college students are more likely to lack college knowledge, delay college enrollment, or not enroll in college at all compared to non-first-generation college students (Engle, 2007; Engle & Tinto, 2008; Tym, McMillion, Barone, & Webster, 2004). Even if first-generation college students successfully

enroll in college, they enroll in less rigorous institutions compared to students with parents that had some form of postsecondary education (Tym et al., 2004).

Furthermore, first-generation college students take fewer credit hours and work more hours per week than students with parents that had some form of postsecondary education (Pascarella et al., 2004). In addition, opportunity does not equate to academic success for first-generation college students, regardless of whether they have been exposed to educational opportunities and resources. Overall, researchers found that even when motivation and academic credentials are provided to first-generation college students, they are still "at a somewhat greater risk of being academically, socially and economically left behind" (Pascerella et al., 2004, p. 276). For example, although the first-generation college student experience may generate some positive outcomes during their postsecondary experience, first-generation college students are unfortunately less likely to have the cultural capital prior to entering college that will allow them to capitalize on educational opportunities to enhance their college readiness, college transition, and overall college experience (Pascarella et al., 2004).

Differentiation in educational outcomes and challenges along the educational pipeline: Now what?

The disparities in educational outcomes by racial/ethnic category, by SES status, and for first-generation college students are problematic. For this reason, the U.S. government and external organizations incessantly put forth education policy and reform efforts in order to improve educational outcomes for students of color, low-SES students, and first-generation college students (Swail, 2000; Swail & Perna, 2002). For example, the U.S. government established "federally-funded TRIO programs [that] are among the largest and oldest of such programs that provide services directly to [low-income and first-generation college students]"

(Engle & Tinto, 2008, p. 7). TRIO programs are structured to provide access to educational resources (i.e., college preparatory courses, college counseling, mentoring, support) that are otherwise difficult for traditionally underrepresented populations to access along the educational pipeline. The federal Pell Grant provides need-base grant money to students from low-SES backgrounds to offset the cost to attend college (U.S. Department of Education, 2012).

Additionally, external programs that are not funded by the U.S. government play a critical role in providing academic and social support for low-SES, first-generation college students and students of color, providing access to resources in order to improve educational circumstances[1] (Swail & Perna, 2002). Specifically, the goals of the external programs include increasing college readiness and college exposure in addition to playing a role in increasing college access for traditionally underrepresented students (Swail & Perna, 2002). There are various programs across the nation that have an overarching goal of increasing access to higher education via the implementation and availability of educational resources that are otherwise not available for traditionally underrepresented groups. However, to capture and assess the impact of pre-college programs in their entirety is difficult. Even Swail and Perna (2002) acknowledge in their assessment of pre-college programs that

> "we know virtually nothing about the thousands of other programs that are currently operating across the nation. We don't know how many there are, where they are, what they do, whom they serve, and what impact they have on the educational opportunity and success of the students they serve. Clearly our capacity to make prudent programmatic and funding decisions is restricted by this lack of knowledge" (p. 17)

Despite this truth, scholars walk away knowing there are a myriad of educational alternatives that are geared toward enhancing academic success for students that come across barriers along the educational pipeline as early as pre-K. There are also federal education

[1] AVID, Gear Up, MESA

policies that play a considerable role in the redesign of curriculum and secondary educational models that receive considerable attention as well. At the U.S. federal level, education policy such as No Child Left Behind (NCLB), Common Core Standards (CCS), and Race To The Top (RTTT) are implemented in order to hold states, districts, schools, and staff accountable for student learning and to stimulate educational innovation that results in practices, supports, and programs to enhance student college and career readiness. Alternative education models such as charter schools and magnet schools, as well as educational practices such as school vouchers, serve as nontraditional alternatives that are implemented to enhance student learning. Even though U.S. federal education policies and alternative education models undergo continuous criticism, the implementation of both is a testament to the never-ending quest at the national, state, and local levels to provide educational opportunities for traditionally underrepresented students.

This dissertation is particularly interested in the educational experiences of traditionally underrepresented students who have participated in a college readiness program. As articulated by Swail and Perna (2002), there are a variety of programs that are not traditionally on the radar that are worth investigating. This work in particular is focused on Middle College-Early College High Schools. MCHS-ECHS is a unique high school program that has caught the attention of those within the realm of social science research. Since the establishment of this educational model, the program has grown significantly and is praised for serving as a catalyst to fixing the "leaky pipeline" by providing traditionally underrepresented students with the academic, cultural, and social support that is needed to thrive academically in high school and to smoothly transition to college, thereby addressing differentiation in educational outcomes by race/ethnicity, SES status and first generation college student status.

Essentially the aforementioned barriers presented in this literature review and the issues of access to resources along the educational pipeline are ideally removed in MCHS-ECHS, and students from traditionally underrepresented backgrounds have the opportunity to progress academically without the hurdles that hinder their educational advancement. MCHS-ECHS is referenced as the "fastest growing pathway model" (Bragg, Kim, & Barnett, 2006, p. 14) to higher education. As such, an examination of the establishment of MCHS-ECHS and literature on MCHS-ECHS will put into perspective a different type of education reform that utilizes a secondary/postsecondary (also known as dual enrollment, or concurrent enrollment; discussed in the following section) partnership to increase access to educational resources in order to enhance college readiness and the transition from high school to college for traditionally underrepresented populations.

Dual Enrollment

Students are preparing for college through an accelerated program called dual enrollment (DE), also known as concurrent enrollment, and articulated credit (Barnett & Stamm, 2010; Golann & Hughes, 2008; Hoffman, Vargas, & Santos, 2009). DE programs are collaborations between high school and postsecondary institutions that allow students the opportunity to take college courses while in high school. Over 40 states have policies surrounding dual enrollment (Karp, Bailey, Hughes, & Fermin, 2004), and more than half of high school students in the United States can enroll in college courses (Waits, Setzer, & Lewis, 2005). Pros associated with dual enrollment include

1. Earning college credit,
2. Gaining experience in a college setting,
3. Reducing the cost to attend college, and

4. Shortening the time to degree.

Reducing college cost and shortening time to degree appear to be ideal because students are earning college credit while in high school. Therefore, they will spend less time taking introductory courses in college and will have no need to enroll and pay for courses beyond their major. However, this general claim needs to be substantiated with research. Regardless of the limitation in research, studies reveal that students in a dual enrollment program increase their chances of enrolling, persisting, and graduating from college (Adelman, 2006; Berger, Adelman, & Cole, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007), and high school students nation wide are enrolling in college courses at an enormous rate.

According to Thomas, Marken, Gray, Lewis, and Ralph (2013), in the 2010-2011 academic school year, "public high schools reported approximately 2 million enrollments in dual credit courses" (p. 3), with 82% of public high schools indicating that students were participating in a dual credit program. Although the academic focus in a dual credit curriculum may differ, students still gain a significant amount of college coursework credit. For example, public high schools with students enrolled in DE that specifically focused on academics indicated that 93% of students received college credit upon completion of the course (Thomas et al., 2013). Public high schools with students enrolled in a DE program with a specific focus on career or technical education also indicated that 85% of the student participants received college credit upon completion of the course (Thomas et al., 2013). For all intents and purposes, this shows that more than 50% of students who participated in dual enrollment, regardless of the focus of the curriculum, received college credit while in high school (Thomas et al., 2013).

In regards to DE contributing to college readiness and student academic success, research shows DE participants are less likely to need math course remediation upon entering college and

more likely to attain a college degree compared to students who do not participate in DE (An, 2013; Kim & Bragg, 2008; McCauley, 2007; O'Brien & Nelson, 2004). Utilizing data from the National Education Longitudinal Data of 1988, An (2013) found that students that earned "six college credits through dual enrollment (e.g., two courses) are 12 percentage points more likely to attain a B.A. than nonparticipants" (p. 67), while simply having fewer than three credits does not increase the odds of degree attainment. Similarly, McCauley (2007) also found that DE played a role in degree attainment regardless of the number of years it took students to complete their postsecondary degree—specifically, that "dual enrollment students are twice as likely to graduate within six years" (McCauley, 2007, p. 33). Thus, participating in DE positively impacts student educational attainment and educational experiences, especially for some traditionally underrepresented students. For instance, research revealed that DE increases the odds that first-generation college students will receive their postsecondary degree (An, 2013). Particularly, DE can provide first-generation students access to enhanced academic curricula that they would not otherwise have access to before participating in DE. For this reason, advocates seek to make DE accessible for "students traditionally underrepresented in higher education, including low-income, racially/ethnically diverse populations, and first-generation college-bound students" (Barnett & Stamm, 2010, p. 5).

DE also serves as a pathway to higher education by creating a transition from high school to college and by providing an opportunity for students to become mentally prepared for postsecondary institutions. The psychological transition from high school to college is critical (Milem, Clayton-Pedersen, Smedley, Myers, & Harrell, 1993), and because DE allows students to physically take courses on a college campus taught by college professors, students gain a sense of what a typical college experience will entail. This can be beneficial for students who do

not "envision themselves as college material" (Hoffman et al., 2009, p. 43). For this reason, aside from the academic benefits associated with DE, students get a sense of what it means to be a college student (Hugo, 2001; Bailey et al., 2002; McCauley, 2007; Museus, Lutovsky, & Colbeck, 2007), thus possibly preparing them for a psychological transition into postsecondary institutions.

The Development of the Middle College High School-Early College High School Concept

In the early 1970s Janet Lieberman sought to develop an innovative program that combined the secondary and postsecondary experience for high school students. The idea resulted in the creation of the Middle College High School concept (MCHS), a dual enrollment program, which are high schools located on college campuses (2-year or 4-year institutions) that are structured to provide high school students with an opportunity to take college classes as early as their freshman year at no cost to the student, although this differs by the type of secondary/postsecondary partnership established between the two institutions (Nakkula & Foster, 2007).

Typically there is an application process students must go through to be considered for enrollment, however this will vary depending on the MCHS-ECHS. Once admitted students pass admissions, they can partake in programmatic resources. Qualified high school teachers can teach courses, but the idea is that students enroll in college courses taught by college faculty. The goal is to decrease high school dropout rates and increase high school completion and college-going rates. The long-term impact is to provide students with a "smooth transition from the students' familiar high school environment to the unfamiliar college campus" (Wechsler, 2001, p. 157).

Since its inception, MCHS has grown immensely and has expanded to include the development of the Early College High School model (ECHS) (Lieberman, 2004). The expansion of MCHS to include ECHS is a result of a Ford Foundation Grant that was awarded in 2000 to pioneering leaders Dr. Janet Lieberman, Dr. Cecilia Cunningham, and colleagues (Ramsey-White, 2012). The ECHS model, including the replication of this educational alternative on a national scale, increased significantly via partnership agreements between secondary/postsecondary institutions and startup funds from the partnering institutions as well as intermediate sponsors and organizations[2] that provide financial capital to implement and replicate this model (Lieberman, 2004).

ECHS encompasses all characteristics of the MCHS but reinforces a closer secondary and postsecondary partnership and outlined educational trajectory for traditionally underrepresented populations (Liberman 2004). Considering ECHS incorporates characteristics of the MCHS, the terms are used interchangeably more often than not when discussed in literature. In fact, there are current MCHS listed as part of the ECHS Initiative that are supported by intermediate partners. The development of ECHS did not replace established MCHS but rather served as an addition to the original MCHS model developed in the early 1970s (Lieberman, 2004), and the ECHS Initiative currently serves "low-income youth, first-generation college goers, English language

[2] Intermediate partners and sponsors that support the development and replication of Early College High Schools: (*Partners*) Board of Regents of the University System of Georgia, Center for Native Education, City University of New York, Educate Texas (Formerly Texas High School Project), Edworks, Foundation for California Community Colleges, Gateway to College National Network, KnowledgeWorks Foundation, Middle College National Consortium, National Council of La Raza, North Carolina New Schools Project, SECME, Inc., Utah Partnership Foundation, Woodrow Wilson National Fellowship Foundation, California Community Colleges, Chicago Public Schools. (*Sponsors*) Bill & Melinda Gates Foundation, Carnegie Corporation of New York, Dell Foundation, Ford Foundation, Lumina Foundation for Education, W.K. Kellogg Foundation, Walton Family Foundation.

learners, students of color, and other young people underrepresented in higher education" (Early College High School Initiative, 2013).

Some states have increased the implementation of this model more than others. North Carolina, California, and Texas are prime examples of states that have received a significant amount of money to create MCHS-ECHS. For example, Le and Frankfort (2011) found that "half of all states have at least one early college, but North Carolina leads the nation with 71 early colleges, each located on the campus of a partnering higher education institution" (p. 1). California received financial assistance from sponsors and partners of the Early College High School Initiative to redesign or renovate 23 Early College High Schools (Foundation for California Community Colleges, 2013). In Texas, there are more than 44 Early College High Schools, with 5 having a specific focus on technology, engineering, and math (Texas Education Agency, 2011). In Illinois, Chicago Public Schools partnered with Cisco, IBM, Microsoft, Motorola Solutions, and Verizon to open 5 science, technology, engineering and mathematics (STEM) Early College High Schools in the fall of 2012 (Chicago Public Schools, 2012). Overall, secondary/postsecondary partnerships, as well as intermediate sponsors and organizations through the Early College High School Initiative, provided the necessary financial support, totaling more than $130 million, which has led to the replication of the MCHS-ECHS program in over 270 schools that serve more than "75,000 students in 28 states and the District of Columbia" (Jobs For the Future, 2014).

The MCHS-ECHS program model has also gained national recognition. According to the U.S. News World Report in 2009, 21 Early College High Schools were recognized as top high schools in the nation, earning gold, silver, and bronze medals for the intensity in academic rigor and the ability to produce college ready students (PRNewswire, 2009). The partnership between

secondary and postsecondary institutions, also known as dual enrollment or concurrent enrollment, is not new; however, the ability for the secondary/postsecondary partnership to particularly serve traditionally underrepresented students is unique. To be specific, MCHS-ECHS is distinctive because it is structured in a way that eliminates the aforementioned barriers along the educational pipeline that impede traditionally underrepresented students' ability to navigate the educational pipeline. As previously mentioned, MCHS-ECHS students basically have the benefits associated with participating in DE. Students are exposed to a rigorous academic curriculum, have access to college resources including counselors, and interact with a college campus. Additionally, the MCHS-ECHS model ensures students experience this opportunity within a small high school environment in order to ensure close interaction with faculty and staff at the high school and college level (Lieberman, 2004). Thus students that participate in the program gain access to resources that positively impacts their educational trajectory (Liberma, 2004).

Relevant Literature on Middle College High School-Early College High School

To further engage the broader audience in understanding the impact of MCHS-ECHS, sponsoring foundations (i.e., the Ford Foundation and Bill and Melinda Gates Foundation) allocate money to organizations such as the American Institute of Research (AIR), Jobs For the Future (JFF), and the National Center for Restructuring Education Schools and Teaching (NCREST) to produce research that examines MCHS-ECHS student educational outcomes. NCREST serves as a strategic partner to the Middle College National Consortium (MCNC). The role of NCREST is to provide research and analysis on student performance, utilizing evaluative methodology to examine student performance in their respective MCHS-ECHS. JFF serves as a partner to the Early College High School Initiative that was created by way of funding from the

Bill and Melinda Gates Foundation to assist the establishment of secondary and postsecondary partnerships in their development and implementation of MCHS-ECHS high schools. JFF also publishes results pertaining to the educational outcomes of MCHS-ECHS students. Particularly, the Bill and Melinda Gates Foundation provided $7 million to JFF to " expand technical assistance, track the progress of students enrolled in the schools, and share best practices" (Dessof, 2005, p. 1), and that information is disseminated to the public. Lastly, the American Institute of Research (AIR) is a world-renowned research organization that produces evaluations for the Early College High School Initiative in regards to the impact of ECHSI on student educational attainment, also funded by the Bill and Melinda Gates Foundation (Berger et al. 2014).

Although the research presented by the three aforementioned organizations may offer little critique of the organizational structure and student educational outcomes due to the political nature of the funding source, the organizations produce some findings pertaining to MCHS-ECHS student college enrollment, persistence, and postsecondary degree completion that serves as documentation regarding the type of impact that should be expected as a result of participating in the MCHS-ECHS model. Review of literature reveals these organizations produce the majority, if not all, large-scale research on MCHS-ECHS. Therefore it is acknowledged that literature pertaining to MCHS-ECHS is by and large centered on analysis of studies conducted by the aforementioned organizations (AIR, NCREST, JFF). The subsequent portion of the literature includes research on MCHS-ECHS provided by scholars within the aforementioned organizations in order to present what is known about the impact of this program on student educational progress and postsecondary degree completion. Thereafter a review of what is

missing in the literature is presented, followed by an explanation of how this work will fill the void in research pertaining to the educational outcomes of MCHS-ECHS students.

College credits while in high School. The academic experience for students enrolled in a MCHS-ECHS is far more advanced than that of a student who is not in a MCHS-ECHS high school. Recall students can take college courses while in high school, with some students beginning as early as their freshman year. From an academic standpoint, students are in a position to prepare for college-level work, thus minimizing or reducing the need for course remediation in college. Researchers have found that students who participate in MCHS-ECHS accumulate a significant amount of college credits by the end of their senior year and perform academically well in their college coursework (Berger et al., 2010; Spence & Barnett, 2008). For example, in their study examining college course-taking patterns, Spence and Barnett (2008) found that by the time MCHS-ECHS students reached 12th grade, they would have accumulated on average 31 college credits and have an average college grade point average of 2.78. Students had a 92% course pass rate, and 56% of the student population earned As or Bs in their college courses. Similar research published by JFF (2012) show that on average MCHS-ECHS students earn at least one year of college credits upon graduating from high school. A published synthesis report written by Berger et al. (2009) reveals that students who graduated in 2006–07 earned 23 college credits." (p. ix).

When Spence and Barnett (2008) disaggregated the average number of college credits accumulated by 12th graders from 12 MCHS-ECHS campuses, they found that seniors in 3 of the 12 MCHS-ECHS accumulated 50 or more college credits. In 5 MCHS-ECHS, seniors accumulated 20 to 40 college credits, and in the remaining schools, seniors accumulated 5 to 18 college credits. The differentiation in the amount of college credits accumulated may be a result

of the structure of MCHS-ECHS. Although not explicitly stated, the agreement between a secondary and postsecondary partnership may determine the amount of college credits a student is allowed to take. For example, a student at MCHS-ECHS beginning their freshman year may accumulate more college credits than a student at MCHS-ECHS that begins the program in their junior year. However, further investigation and research are needed to support this claim and to understand why there is variation in the amount of college credits students accumulate.

Self-Efficacy. The next sets of studies suggest that self-efficacy plays a role in shaping students' experience at MCHS-ECHS. One aspect of college readiness and college success is student sense of self-efficacy, particularly positive self-concept, realistic self-appraisal, and successful handling of the system (Sedlacek, 2004). Self-efficacy is defined as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (Bandura, 1994, p. 71). A strong sense of self-efficacy enables individuals to address problems they encounter, while having a low sense of self-efficacy "may cause an individual to underestimate his or her skills and abilities, resulting in perceptions of difficult tasks as challenges to be avoided" (Baber, Pifer, Colbeck, & Furman, 2010, p. 31). Perception of self-efficacy can be derived from four main sources:

1. Mastering experiences
2. Utilizing the experience of others to enhance or undermine self-efficacy
3. Social persuasion
4. Reducing individual stress levels and altering their negative predisposition

When students are given the chance to enhance their self-efficacy through mastering experiences, success in a given task builds self-efficacy and failure undermines it. The second source of self-efficacy involves utilizing the experiences of others. Particularly seeing people

like the individual succeed may enhance one's self-efficacy; however, seeing the failure of an individual may undermine the development of self-efficacy. The third source of self-efficacy is the use of social persuasion. Instilling the belief that individuals possess the necessary skills to be successful in a given task may enhance self-efficacy, whereas telling an individual they do not have the necessary skills to complete a task may undermine self-efficacy. Lastly, reducing individual stress levels and altering individuals' negative predisposition about a task may develop self-efficacy. This involves modifying an individual's predisposition during a time of emotional stress, considering this is a critical time when people make decisions about their ability to perform a given task (Bandura, 1994).

Self-efficacy provides a perfect lens to examine how MCHS-ECHS students feel about their ability to do college-level coursework in high school considering MCHS-ECHS is structured to introduce students to college-level expectations and environment. To this end, self-efficacy can be utilized to examine how MCHS-ECHS students perceive their college readiness and performance in college-level work.

According to Spence and Barnett (2007), MCHS-ECHS students appear to have high self-efficacy in relation to their experience in specific subject areas. Spence and Barnett (2007) examined MCHS-ECHS students' self-efficacy and attitudes about school, math, and writing. The analysis of students' self-efficacy and attitudes about school, math, and writing were drawn from a larger report that examined "students' perceptions of and experiences with the schools and the Early College initiative" (Spence & Barnett, 2007, p. 1). Based on the responses, MCHS-ECHS students typically had high levels of self-efficacy in relation to school. Of the 1,552 MCHS-ECHS students surveyed, "Sixty-one percent of students stated that they felt like they were successful in school and seventy-five percent of students found it easy to stick to their aims

and accomplish their goals" (Spence & Barnett, 2007, p. 3). Additionally, students felt more comfortable with writing instead of math. Fifty-six percent of the students stated writing was easy. In relation to math, 46% stated math was easy.

Student self-efficacy was also tracked over time. Spence and Barnett (2007) matched respondents' answers from a 2003-2004 survey to a 2005-2006 survey. During the 2003-2004 school year, respondents were freshman, and in the 2005-2006 school year they were in 11th grade. Longitudinal analysis reveals students displayed a lower level of self-efficacy in math in 11th grade (25%), than they did in 9th grade. Students continued to have high self-efficacy in writing in the 11th grade. This finding is interesting considering participation in a course beyond Algebra II is a key indicator for student academic success (Adelman, 1999). Similarly, NCREST senior analyst Kim (2011) also examined self-efficacy, particularly how students felt about their plans after high school, ability to perform college coursework, and whether they viewed themselves as college students. Survey data was collected from the graduating classes of 2007, 2008, and 2009, and 90% "of the students over the past three years agreed or strongly agreed that they have a clear understanding about college, can imagine themselves as a college student, and feel confident about handling college coursework" (Kim, 2011, para. 6).

Social Capital. An additional aspect of college readiness is social capital. Researchers have found that social capital and social support play a role in student academic success (Farmer-Hinton, 2008; Farmer-Hinton & Adams, 2006; Farmer-Hinton & McCullough, 2008; McDonough, 2005; Perna & Titus, 2005; Ramsey-White, 2012). Ramsey-White (2012) examined Early College High School student experiences and how those experiences contributed to student college readiness and transition to college. Ramsey-White (2012) utilized a case study approach of 24 MCHS-ECHS participants to provide an in-depth understanding of social support

and relationships on student academic success. Findings revealed that "participants shared that the teachers at early college helped them to hone their critical thinking skills, which resulted in their increased confidence in the classroom in their colleges as well as enabling them to integrate and synthesize their learning across disciplines and content" (pp. 143-144). Thus supporting research shows that institutional agents and social capital play a role in student academic success and academic achievement (Farmer-Hinton & Adams, 2006; Stanton-Salazar, 1997, 2011; Stanton-Salazar & Spina, 2005).

Research conducted by JFF examined MCHS-ECHS alumni student educational outcomes from a qualitative perspective and similarly showed that social capital plays a role in student persistence in college. In 2003, JFF established a research team, led by Dr. Nakkula, with the Harvard Graduate School of Education to conduct a longitudinal qualitative study of two Early College High Schools: Wallis Annenberg High School in Los Angeles and the Dayton Early College Academy in Dayton, Ohio. Forty-three students were included in the qualitative longitudinal analysis (Nakkula, 2011). The highlighted findings revealed that students encountered challenges economically, academically, and socially, but students adapted to their college environment.

Specifically, results showed that MCHS-ECHS alumni utilized the skills they gained in MCHS-ECHS to navigate their postsecondary institution (Nakkula, 2011), which essentially showed that MCHS-ECHS plays a role in providing students the necessary skill-set to succeed in college. Data also suggested that students were able to adapt to their new environment based on the high school preparation received at their MCHS-ECHS. In addition, although the transition to college was difficult, students were able to cope with college by relying on their secondary resources, specifically going back and contacting their Early College High School instructors for

support (Nakkula, 2011). Furthermore, once in college, alumni were engaged in leadership roles across campus and often served as role models to MCHS-ECHS students in their former high schools. This shows that sustained relationships and supports in MCHS-ECHS may be a significant factor in student persistence in college and therefore that social capital and social networks played a considerable role in student academic success. As such, there is some evidence that MCHS-ECHS may play a role in the psychological transition to college (McCauley, 2007). This is critical for students who have never experienced college, possibly allowing for a smooth transition into an environment that is unfamiliar.

Interestingly however, while researchers found that some MCHS-ECHS students continue onto postsecondary institutions and utilize the skills as well as supports that they have gained in MCHS-ECHS to navigate their college environment (Nakkula, 2011), additional studies must be conducted to substantiate these findings. The qualitative research presented is minimal, and more studies that incorporate student voices, particularly their perspective of their college readiness experience, are warranted. Qualitative data from this work will provide first-hand account of student educational outcomes and allow us to understand how MCHS-ECHS alumni utilize social support and MCHS-ECHS resources to navigate institutional structures in order to improve their academic success.

The impact of MCHS-ECHS: College enrollment, degree completion and college readiness.

Another key aspect of the MCHS-ECHS experience is to increase student enrollment, persistence, and degree completion in college post high schools. Interestingly, because MCHS-ECHS is relatively new, limited data exists that tracks students post high school. To date, only three impact studies are known to exist, so our understanding of whether MCHS-ECHS students successfully completed a bachelor's degree or graduate degree is limited (see Berger et al., 2014;

Edmunds et al., 2012; Miller & Corritore, 2011**)**. Berger et al. (2014) however, articulated that although research is narrow, what is currently published in regards to MCHS-ECHS is promising. The most recent impact study published was conducted by Berger et al. (2014), and examined the impact of MCHS-ECHS on student educational outcomes.

The central questions for the evaluation were as follows:

1. Do Early College students have better outcomes than they would have at other schools?

2. Does the impact of Early College High School vary by student background characteristics?

The Early College lottery admissions process provided researchers with an ample opportunity to compare the educational outcomes of Early College students to their non-Early College counterparts[3]. Utilizing student survey data across 10 Early College High Schools that are part of the Early College High School Initiative and National Clearing House data, Berger et al. (2013) found that Early College students were more likely to enroll in college, earn a postsecondary degree, and enroll in college after high school in contrast to the comparison group in the study.

With regard to college enrollment while in high school, findings reveal Early College students had a higher percentage of college enrollment in comparison to their non-Early College counterparts (63.5% vs. 24.3% respectively. Berger et al. (2014) further examined college enrollment immediately after high school (designated at year 5) and college enrollment two years post high school. In both instances, Early College students had a higher percentage of college enrollment in comparison to their non-Early College counterparts. For instance, "[by] the end of

[3] For the purpose of this work, non-counterparts refer to the comparison group, which is comprised of students that applied to ECHS, but were not admitted.

Year 5, 77.9 percent of Early College students and 67.2 percent of comparison students had enrolled in college," and "[by] the end of year 6, 80.7 percent of Early College students and 70.7 percent of comparison students had done the same" (p. 10). Thereby showing that being an Early College student significantly impacts college enrollment. When examining college enrollment by institutional type (2-year vs. 4-year) the results are noteworthy.

In their study, Berger et al. (2014) also examined the trends of college enrollment in a 2-year vs. 4-year comparing Early College students to the comparison group. Being admitted to an Early College had a positive significant impact on attending a 2-year college, while not being admitted did not have a positive significant impact on 2-year college enrollment. Berger et al. (2014) suggests that this finding is expected seeing as though most of the Early Colleges in the study were partnered with 2-year community college. By year 4 (the closing of the Early College students high school program), 48.3% of Early College students enrolled in a 2-year college during the study period, while the 2-year college enrollment for the comparison group was 12%. During year 5 (college enrollment after high school completion), 55.8% of Early College students enrolled in a 2-year, while the 2-year college enrollment for the comparison group was 30.7%. Finally, by year 6 (two years post high school), 60.8% of Early College students attended a 2-year college during the study period while the 2-year college enrollment for the comparison group was 40%.

With regard to 4-year college enrollment rates, surprisingly, "being admitted to an Early College did not have an impact on attending a 4-year college during the study period" (Berger et al. 2014, p. 13). The findings particularly show that "the percentage of Early College students who attended a four-year college (54.4 percent) was not significantly different than the percentage for comparison students (50.1 percent)" (Berger et al. 2014, p. 13). Regrettably,

enrollment rates are somewhat problematic and deserve further examination. Berger et al. (2014) showed that their findings were similar to Horn and Nunez's (2000) research that shows, "disadvantaged students are less likely to enroll in a 4-year institution, even if academically prepared" (p. 14).

Regarding degree attainment, in general Early College students had a higher percentage of earning a postsecondary degree compared to their non-Early College counterparts (24.9% versus 4.7%, respectively). When taking a closer examination of the type of postsecondary degree attainment, 22.7% of Early College students earned an associate degree in contrast to the comparison group in which 2.4% earned an associate degree. At the bachelor's level, the numbers are relatively small. However, this is due to the limitation in the data that were collected. In particular, Berger et al. (2014) mentioned, "because we tracked our full study sample only through the end of Year 6, our data do not allow us to make inferences about the long-term degree attainment rates that would be most useful for answering this question" (p. 18). Unfortunately, Berger et al. (2014) were unable to address the following question, "what impact do Early Colleges have after students leave the highly structured and scaffolded high school environment? Despite this limitation, Berger et al. (2013) were still able to gain a brief insight into bachelor's degree attainment. Early College students had a bachelor's degree attainment of 4.5% in contrast to the comparison group's 1.2%.

Edmunds et al. (2012) conducted the second impact study, which is an experimental study of ninth grade findings implemented to

1. Determine the impact of the model on selected student outcomes,

2. Determine the extent to which impacts differ by student characteristics, and

3. Examine the implementation of the model and the extent to which specific model components are associated with positive outcomes.

The data used in their work was drawn from a longitudinal study that examined the implementation and impact of Early College in North Carolina. Similar to the study conducted by Berger et al. (2014), Edmunds et al. (2012) also relied on data from schools that utilized a lottery process to generate a comparison group. Findings were centered on two main topics: academic outcomes, specifically in the course areas of math and English, and attitudinal and behavioral outcomes. According to Edmunds et al. (2012), with regard to academic outcomes, results showed that the Early College in their study played a role in putting students on track to college as a result of offering a college preparatory math course, which according to Adelman (1999) is a key indicator for college success. More importantly, Edmunds et al. (2012) found that students in the comparison group were not on the path to college as indicated by the low level of college preparatory course taking in high school. There was no difference in course pattern taking when examining English. With regard to attitudinal and behaviors, Edmunds et al. (2012) found that Early College "reduced" (p. 150) suspension rates and played a role in reduced absences from school, thus revealing that Early College considerably impacts not only college course taking but also school attendance.

The final impact study worth noting was conducted by Miller and Corritore (2011), who examined the "impact of North Carolina's Early College High Schools on college preparedness" (p. 1). In particular, they utilized student information that is part of a longitudinal data set from North Carolina, to track student progression along the educational pipeline. The results are a work in progress; as such, findings should be viewed with caution. Findings revealed "ECHS students are more likely to progress successfully through the pipelines, especially in

mathematics, than students statewide on both pipeline progression measures, especially with respect to persistence (course-taking)" (Miller and Corritore, 2011, p. 20). For example, when course taking and progression are compared with science, results showed that Early College students had a "lower rate of on-track progression" (Miller and Corritore, 2011, p. 20). However, with regard to math, there was a high rate of on-track progression. This finding is similar to Edmunds et al. (2012) in that it also shows that "ECHS students are more likely to persist and perform proficiently in the college preparatory mathematics" (Miller and Corritore, 2011, p. 20) and, more importantly, statewide (Miller and Corritore, 2011).

Gaps in Literature

Based on the review of literature, we know that students in MCHS-ECHS accumulate college credits while in high school, have a high level of self-efficacy, and enroll in postsecondary institutions. We also know that social supports impact MCHS-ECHS student academic success. In addition, we understand that MCHS-ECHS serves as a platform that challenges the "college isn't for everyone" discourse by showing that if traditionally underrepresented students are at least given the chance to succeed, they may very well excel beyond the minimal expectations that are more often than not deficit driven. While we understand MCHS-ECHS as a college readiness program in theory and plausible outcomes of having participated in the program, we still do not have a clear or substantiated understanding of MCHS-ECHS student educational outcomes after college enrollment or student perception of their college readiness experience.

This limitation is attributed to the complexity of how college readiness is measured and defined, in addition "to inconsistent data gathering across states, [which makes it] difficult to arrive at a comparative rate [for MCHS-ECHS high school completion and matriculation]

nationally" (JFF, 2012, p. 1). More importantly, due to the lack of inconsistent quantitative data on student educational outcomes and college readiness experiences, the same limitation holds true with regard to the constraint in collecting qualitative data on MCHS-ECHS student educational outcomes and perception of their college readiness experience. Questions regarding educational outcomes after MCHS-ECHS and student perception of their preparation for college remain partially answered.

In addition, the review of literature alludes to the fact that MCHS-ECHS is not implemented consistently across states. Thus what one student may gain academically and socially from a MCHS-ECHS in California is not the same academic or social gain a student will receive at a MCHS-ECHS in North Carolina. As such issues of equity may very well be an issue that undergirds the overall goal of MCHS-ECHS, which is to provide college readiness educational opportunities for students that are traditionally underrepresented in education. Furthermore, sponsorship donation for MCHS-ECHS is not the same across states, and is often time limited. For that reason, variation in funding for MCHS-ECHS is problematic and there is lack of a sustainable funding stream to support the longevity and scalability of the MCHS-ECHS. For example, while attending the National Early College Conference in North Carolina, program administrators and directors often spoke about the need for financial support and stability in order to ensure MCHS-ECHS opportunities are provided to students that need them the most. Directors mentioned not being able to scale up their program to offer more opportunities for students and more often than not faced the possibility of school closure and diminished college readiness support for students that currently are part of their respective MCHS-ECHS program.

This dissertation contributes to the movement of closing this gap in literature by employing a sequential explanatory mixed methodological approach that incorporates descriptive data on MCHS alumni student outcomes and interview data that gather MCHS student perspectives of their college readiness in order to gain a better grasp of MCHS matriculation and postsecondary degree completion. Furthermore, I provide insight to the organizational structure of MCHS in order to illuminate how the secondary/postsecondary may or may not positively play a role in student educational outcomes. I utilized David Conley's (2007) comprehensive college readiness framework as a lens to understand facets of college readiness and social capital theory to examine various supports, networks, and relationships within MCHS-ECHS that may attribute to student academic success. The following frameworks and how they are utilized as a lens to understand findings are presented in detail in the following section.

Conceptual Framework: College Readiness, Social Capital, and Cultural Capital

***College Readiness*.** Due to the complex nature of college readiness, there is no agreed upon definition of what it means to be college ready. Current research attempts to guide us through various nuances and explanations in order to answer the aforementioned questions. However, various inconsistencies in how college readiness is defined and measured problematizes the notion of college readiness. College readiness is measured by standardized scores as well as non-cognitive factors, which are both cited as factors contributing to our understanding of student college preparedness and success in postsecondary institutions (Sedlacek, 2004). Today colleges/universities and research organizations (ACT, SAT) utilize standardized test scores and grade point averages (GPA) to determine student admission and college readiness (Briggs, 2001). To this end, standardized test scores such as SAT, ACT, and GPA are utilized to examine readiness for college-level work in order to predict student

academic success in college for students from all backgrounds (Atkinson, 2001; Briggs, 2001; Fleming, 2002; Hoffman & Lowitzki, 2005; Kobrin, Patterson, Shaw, Mattern, & Barbuti, 2008; Roderick, Nagaoka, & Coca, 2009; Sedlacek, 2004).

For example, a recent report published by ACT examined college readiness of African American students. The following college readiness benchmarks by subject were examined: English, Reading, Mathematics and Science. Findings reveal that African American students had a lower participation in college readiness subjects in comparison to their counterparts. In the percentage of graduates meeting college readiness benchmarks by the aforementioned subjects were considerably lower than their non-African American counterparts. Thus insinuating that African American students are not prepared for college.

On the contrary, however, although SAT, ACT, and GPA are used as predictors to assess student college readiness and academic success, researchers have found that the utilization of standardized test scores to predict student educational outcomes is problematic, especially for traditionally underserved populations. This is in part due to the fact that "ability factors alone, however, are not sufficient to account fully for individual differences in academic success" (O'Connor & Paunonen, 2007, p. 972). More importantly, standardized testing only predicts how some students perform academically the first year in college and is not culturally responsive because it does not predict academic success for "people of color, women, or anyone who has not had a White, middle-class, Euro-centric, heterosexual, male experience in the United States" (Sedlacek, 2004, p. 6). As such, standardized measures alone should not be the only factor to determine college readiness and educational outcomes (Sedlacek, 2004).

Non-Cognitive Factors. Sedlacek (2004) posits that the following non-cognitive variables can supplement assessment of student educational outcomes: positive self-concept,

realistic self-appraisal, successful handling of the system, preference for long-term goals, availability of strong support systems, leadership experience, community involvement, and knowledge acquired in the field. In addition, non-cognitive factors such as participation in a rigorous curriculum, academic behaviors, motivation, college counseling, aspirations, social capital, self-efficacy, and parental involvement all play a role in predicting student college preparation and academic success (Cabrera & La Nasa, 2000; Choy, 2001; Farmer-Hinton, 2008; Farmer-Hinton & Adams, 2006; Holland & Farmer-Hinton, 2009; Le, Casillas, Robbins, & Langley, 2005; Linnenbrink & Pintrich, 2002; McDonough, 2005; Perna & Titus, 2005; Ramsey-White, 2012; Swail & Perna, 2002).

The assessment of non-cognitive factors is critical in college readiness considering that such factors impact student achievement and are as good as cognitive factors in predicting student outcomes (Hood, 1992; Palmer, Maramba, & Holmes, 2011; Sedlacek, 2004; Tracey & Sedlacek, 1985, 1987). Dennis, Phinney, and Chuateco (2005) examined the role of non-cognitive factors such as motivation, parental support, and peer support on the academic success of ethnic minority students. Dennis and her colleagues (2005) found that personal and career motivation played a role in students' outcomes, suggesting that non-cognitive factors contribute to college success. In their examination of the experiences of 11 African American males at a Historically Black College, Palmer and Strayhorn (2007) also found that non-cognitive factors were associated with student success. Specifically, the researchers found that motivation and developing a passion for a major played a critical role in student achievement. Moreover, Allen, Robbins, and Sawyer (2010) conducted a meta-analysis that summarized the validity of psychosocial factors (PSF) on college outcomes. Their analysis of previous studies suggests that

PSF were just as good as cognitive-based variables (e.g., grades and admission test scores) in predicting academic performance and persistence.

It is apparent that researchers have extensively contributed various methodological approaches and theoretical frameworks to understand the college readiness process. Therefore it is imperative to examine college readiness from a comprehensive perspective. A holistic approach allows for a broader understanding of what to look for in the college readiness process and how college readiness strategies can be accessible to various students, especially students traditionally underrepresented in education. The most relevant cited college readiness model in access literature is David Conley's (2007) comprehensive college readiness conceptual model.

David Conley's comprehensive college readiness conceptual model

David Conley (2007) developed a comprehensive college readiness model that allows researchers and educators to examine various aspects of college readiness without having to be restricted to traditional standardized college readiness indicators. Conley's (2007) framework is a guiding lens, and it is not a single framework to analyze college readiness for all students. Therefore before moving forward to explain the model, the limitations of this framework should be addressed. By addressing the limitation, I avoid the common perception that college readiness is a one-size–fits-all conceptual model (Barnes & Slate, 2013). I acknowledge that Conley's (2007) comprehensive college readiness model lacks culturally responsive college readiness tenets and more importantly does not take into consideration issues of educational inequality that impact access to educational resources for traditionally underserved students. For this reason, David Conley's (2007) comprehensive college readiness framework neglects the impact and issues of systematic institutional racism that perpetuates educational inequality and social stratification (Castro, 2013).

For example, historically not all students have been incorporated into mainstream education, and for this reason access to educational resources for traditionally underserved groups were legally prohibited and inaccessible (Fraser, 2010). As a result, the inability of traditionally underserved groups to participate in programs geared toward their academic success created a long lasting gap in academic achievement. Therefore it must be reiterated: not all students have equal access to educational resources that might positively influence their educational attainment. This includes the ability to participate in college readiness tenets outlined in Conley's (2007) comprehensive college readiness model. For this reason, Conley's comprehensive college readiness model does not serve all students and is not culturally responsive to explain the college readiness process for students traditionally underrepresented in education. As such, I employ the comprehensive college readiness model with caution.

Conley (2007) operationally defines college readiness as "the level of preparation a student needs in order to enroll and succeed—without remediation—in credit-bearing general education courses at a postsecondary institution" (p. 5). Specifically, he articulates that a student who is ready for college should have the following: key cognitive strategies, knowledge in key content areas and skills, the ability to display certain academic behaviors, and some level of contextual skills and awareness. For Conley (2007), to succeed is to complete "entry-level courses at a level of understanding and proficiency that makes it possible for the student to consider taking the next course in the sequence or the next level of courses in the subject area" (p. 5). The four college readiness components are further outlined below:

1. Key cognitive strategies, described as "intellectual openness, inquisitiveness, interpretation, precision and accuracy, and problem solving" (Conley, 2007, pp. 13-14)
2. Knowledge in key content areas and skills, described as "writing, research, English, Math, Science, Social Studies, World Languages, and the Arts" (Conley, 2007, pp. 14-15)

3. Academic behaviors, described as "study skills, time management, and organizational skills" (Conley, 2007, pp. 15-16)

4. Contextual skills and awareness, described as "understanding academic culture, admission processes, financial aid, knowledge of tuition and fees, and college options" (Conley, 2007, p. 17)

MCHS is unique in the sense that it is particularly structured to enhance student college readiness and transition to college. In this work, I posed survey statements and interview questions centered on David Conley's (2007) four tenets to traditionally underrepresented students and utilized their responses as a mechanism to critique the comprehensive college readiness framework. By utilizing this approach, I brought to the forefront the college readiness experiences of students that are known to face institutional and societal barriers that challenge their educational progress. Thus moving towards an understanding of a culturally responsive college readiness framework.

Social capital

Social capital is a well-researched concept in social science and educational research and is commonly traced back to the works of Pierre Bourdieu (1986) and James Coleman (1988). Social capital is broadly understood as the amount of resources an individual can accrue through the formation of or membership in a particular group (Dika & Singh, 2002; Lin, 1999a, 1999b, 2000) and has an underlying assumption of return investment on social relations (Lin, 1999a). Beneficiaries of social capital have the ability to gain access …"useful information about opportunities and choices otherwise not available" (Lin, 1999a, p. 31). As such, review of the literature suggests that social capital is a favorable asset "which has the potential to increase and or improve life outcomes for individuals" (Ramsey-White, 2012, p. 14). Additionally, while the benefits of attaining social capital are critical to advancing individual networks and relationships

that yield intangible and tangible resources and opportunities (Coleman, 1988), equally if not more important are the individuals or circumstances that create networks that will allow an individual to attain it. For this reason, when examining social capital it must be taken into consideration what individual(s) or structure(s) are responsible for providing access to opportunities, and how this process of creating access to social capital occurs (Bourdieu, 1986; Lin, 1999a; Stanton-Salazar, 1997; Stanton-Salazar & Spina, 2005). Examining institutional agents as identified by Lin (1999a) and Stanton-Salazar (1997) will unmask how it is possible for traditionally underrepresented students to gain information that can positively influence their path to higher education.

Institutional agents. As previously mentioned, access to social capital depends on the relationships established with institutional agents. When explaining how and why social capital works, Lin (1999a) addressed the role agent's play in the development of opportunities, especially if the institutional agent holds a position of power and authority. For example according to Lin (1999a),

> "social ties may exert influence on the agents (e.g., recruiters or supervisors of the organizations) who play a critical role in decisions (e.g., hiring or promotion) involving the actor. Some social ties, due to their strategic locations (e.g., structural holes) and positions(e.g., authority or supervisory capacities), also carry more valued resources and exercise greater power (e.g., greater asymmetry in dependence by these agents), in organizational agents' decision- making. Thus, "putting in a word" carries a certain weight in the decision-making process regarding an individual" (p. 31).

Similarly, Stanton-Salazar contends that institutional agents are critical in the creation of opportunities, especially for traditionally underrepresented populations. According to Stanton Salazar (1997) an institutional agent is as follow,

> "an individual who occupies one or more hierarchical positions of relatively high-status and authority. Such an individual, situated in an adolescent's social network, manifests his or her potential role as an institutional agent, when, on behalf of the adolescent, he or

> she acts to directly transmit, or negotiate the transmission of, highly valued resources (e.g., high school course requirements for admission to four-year universities)" (p. 5).

Institutional agents include but are not limited to teachers, family members, peers, mentors, counselors, and local communities (Farmer-Hinton & Adams, 2006; McClafferty & McDonough, 2002; Perna & Titus, 2005; Smith, 2007; Stanton-Salazar, 1997). For traditionally underrepresented students that do not have easy access to educational opportunities, an institutional agent is one way to gain access to educational resources that will allow students the chance to tap into resources that will serve as a mechanism to assist them on their journey into higher education. For example, as summarized by McDonough (2005) with regards to college counselors (a possible institutional agent), if they take an active role in providing student support, their outreach efforts can serve as a college access point for "low-income, rural, urban, first generation and students of color"(p. 13). This is exceptionally beneficial considering these populations are identified as having the most issues in accessing opportunities that assist in advancing their education.

The abovementioned literature pertaining to counselors as institutional agents is echoed in a study that was conducted by Farmer-Hinton and Adams (2006) that examined social capital and college readiness, taking into considering "the role of counselors in a college prep school for Black students" (p. 101). Their results show that counselors at Glenn Hills College Preparatory Charter High School (GHCP) provided social supports and academic resources that included but is not limited to: college advising and college talk. In addition, counselors provided personal support services to help students deal with contextual issues outside of school. Thus showing that counselors not only played a role in helping students navigate the educational pathway, but also helped them to understand they are not confined by their socioeconomic condition that more often than not negatively impacts their educational trajectory (Farmer-Hinton & Adams, 2006).

Simply having the additional support was also critical to the college preparation of traditionally underrepresented students at GHCP. Farmer-Hinton and Adams (2006) is one of many studies in the literature that shows the importance of institutional agents on the enrollment, persistence and college readiness for student populations that need counseling services.

Social capital limitations. Accessing social capital is easier in theory than in practice. Benefits of social capital are only accrued if a relationship exists between an individual and an institutional agent. Stanton-Salazar (1997) specifically argued that social capital depends on "successful interactions with various agents within school domains" (Stanton-Salazar, 1997, p. 17). Unfortunately, it could be the case that the development of social capital is undermined by the stratification of educational opportunities within educational systems that are "alienating and exclusionary" (Stanton-Salazar, 1997, p. 17) and are not readily available to working-class minority youth. MCHS-ECHS is structured to incorporate institutional agents in the daily educational experiences of MCHS-ECHS students. Thus in an ideal MCHS-ECHS context, institutional agents are active in ensuring MCHS-ECHS students receive the necessary access to academic curriculum, social supports, and college knowledge that are critical components of enrolling, persisting, and graduating from college. This dissertation employ social capital theory in order to gain a general understanding of how MCHS alumni perceive institutional agents as playing a role or the lack thereof on their college readiness process and transition from high school to college.

Social network theory

While social capital theory is employed to illustrate the benefits that accrue via relationships and memberships within groups and between individuals, social network theory is employed as a broader lens that is concerned with ways in which networks are initially structured

(Lin, 2008; Rios-Aguilar & Deil-Amen, 2012). As simply put by Rios-Aguilar and Deil-Amen (2012), a social network "captures dynamics at the intersection between the individuals and larger social and institutional structures in which they are embedded" (p. 181). As such, Lin (2008) argued that combining the two (social capital and social network theory) terms or utilizing them interchangeably is incorrect. Essentially, networks produce social capital, not the other way around. Lin (2008) posited, "networks provide the necessary condition for access to and use of embedded resources. Without networks, it would be impossible to capture the embedded resources" (p. 58). Furthermore, networks consist of network features, which are the establishment of resources within a given network that makes it possible for individuals to accrue benefits that could possibly play a role in their educational, economic, and social enhancement (Lin, 2008).

For example, in their study, Rios-Aguilar and Deil-Amen (2012), "the characteristics of Latina/o students' social networks and their professional relevance" to their enrollment, persistence and degree completion was mapped. Careful review of semi-structured interviews and written responses reveal that social networks played a tremendous role in encouraging students to attend college, however once students transitioned to college, " their social networks, particularly after they arrive on campus, provide little guidance regarding choice of major and planning for professional, career, and postgraduate options after college" (p. 192). The findings presented by Rios-Aguilar and Deil-Amen (2012) is unique because it shows the pros and cons of having and not having access to a social networks. On one hand, Latina/o social networks were beneficial in that networks served as a mechanism to increasing access to education. On the opposite end of the spectrum however, the lack of not having a social network once students transitioned into college limited their ability to explore possible career plans (Rios-Aguilar and

Deil-Amen, 2012). This finding is a perfect transition into the subsequent section that specifically touches upon the importance of the type of social network and reciprocity that comes along with certain types of social network.

Social networks also depends on the differentiation of intensity and reciprocity in social relations that plays a key role in the amount of resources that are shared and exchanged within a given network. Although each layer does not make explicit reference to the type of resources and capital shared within each relationship, it still reveals that the intensity of relationship can play a role in the extent to which information is reciprocated based on the depth of a relation. Lin (2008) posited inner layer relationships (i.e., family) are "binding in that ties are obligated to reciprocate exchanges and services to one another" (p. 12). At the intermediary layer, sharing of resources and information is common, but members do not have binding relations that create obligated exchanges of resources. Rather, the ties are bonding and the "sharing certain interests and characteristics keeps the ties in a 'social circle'" (Lin, 2008, p. 12). Finally, the outer layer is based on a sense of belongingness that is a result of shared membership and identity (Lin, 2008). The following layers and inquisition pertaining to ways in which networks are established were employed to understand how MCHS alumni are initially introduced to their college readiness process in order to illuminate the type of networks and relationships that introduced MCHS alumni to their college readiness resources and educational opportunities. In addition, similar to the study conducted by Rios-Aguilar and Deil-Amen (2012), I mapped out the social network of a few Northern California MCHS Alumni to provide a visual that explains the role if at all social networks play in their enrollment, persistence and degree attainment at their respective institution.

Cultural capital

Similar to social capital, cultural capital (also coined by Pierre Bourdieu 1986) has been the focus of scholarly research for quite some time and is examined in the realm of the sociology of education (Lareau & Weininger, 2003). To be specific, Bourdieu (1986) was interested in examining the way in which "culture and education interact, thereby contributing to the social reproduction of inequality" (Roscigno & Ainsworth-Darnell, 1999, p. 159). Cultural capital "can exist in three forms" (p. 47): embodied state (dispositions of the mind and body), objectified state (cultural goods, such as books, instruments, and machines), and institutionalized state (educational qualifications). Interestingly, while the concept of cultural capital has gained much attention, it is also heavily criticized (Kingston, 2001). Cultural capital has been noted as lacking clarity (Kingston, 2001), however it is commonly defined as an individual's familiarity and ability to navigate "dominant culture in society" (Sullivan, 2011, p. 3). In addition, more often than not cultural capital is a class characteristic that is traditionally associated with social elites, high-class members in society (Roscigno & Ainsworth-Darnell, 1999). Because of this, "cultural capital is also important because it has improved our understanding of the process through which social stratification systems are maintained" (Lamont & Lareau, 1988, p. 154).

When critically examining cultural capital, the concept is also comprised of shortcomings in its application to practice. Most notably, scholars Lamont and Lareau (1988) reviewed cultural capital and came to the conclusion that the theoretical framework excludes groups that do not fit into dominant culture. As similarly pointed out by Kingston (2001), cultural capital is inherently exclusionary because "it is largely the property of the existing elite. The elite benefits because 'their' particular cultural signals, not others are rewarded (Kingston, 2001, p. 89). Therefore although it may appear that cultural capital is structured to unmask social reproduction in

society, it's pitfall is that it is exclusionary to all other cultures and does not place value on any traditional customs other than the elite (Yosso, 2005).

As such, Kingston (2001), Lamont and Lareau (1998) argued that cultural capital should be redefined as follow, "cultural capital is institutionalized, i.e., widely shared, high status cultural signals (attitudes, preferences, former knowledge, behaviors, goals and credentials) used for social and cultural exclusion" (p. 89). The suggested definition takes into account the innate exclusionary practices associated with cultural capital that devalues individuals that do not belong to the existing elite. Of course the suggested definition and whether or not is the undertone of Bourdieus (1986) cultural capital is up for debate. However the general notion is that it is bias in that it favors elite practices and disregards others (Yosso, 2005).

Despite the shortcoming of cultural capital, the concept is utilized in educational research. This is due to the fact that educational institutions are credited for the "transmission of advantage across generations" (Lareau & Weininger, 2003, p. 568). For example, as summarized by Welton and Martinez (2013), "according to cultural capital theory, high schools generally emphasize the capital of White middle class students and their families as the dominant norm for academic success and the pursuit of college readiness opportunities" (p. 3). Regrettably, students that are marginalized face issues within institutional and societal barriers (AP courses, tracking, gatekeeper courses) that deprive students of college readiness resources (McDonough, 2005; Welton & Martinez, 2013). As a consequence their process of gaining cultural capital is minimal if judged by the traditional cultural capital theoretical lens. Luckily, scholars have taken the time to understand the contributions families of traditional underrepresented students have on the educational progress of their children.

To be specific, scholars have contributed new theoretical lenses that are employed to understand the ways in which traditionally underrepresented students gain access to knowledge that plays a role in their academic success. Case in point is the development of discourse centered on funds of knowledge, which speaks to information that students gain "in the out-of-school worlds that they inhibit" (Barton & Tan, 2009, p. 52). Funds of knowledge are therefore grounded in the idea that curriculum and educational school settings are not culturally responsive to traditionally underrepresented populations. In addition, it is grounded in the argument that just because students are not part of the dominant culture does not mean they lack knowledge regarding the way they view the world. According to Moll (1992), a "student's community represents a resource of enormous importance for educational change and improvement" (p. 21).

In fact, funds of knowledge is unique because it personifies "the essential cultural practices and bodies of knowledge and information that households use to survive, to get ahead, or to thrive (Moll, 1992, p. 21). Importance is placed on the information and cultural practices students gain from home that is used to help students understand and navigate the world they live in. Funds of knowledge is a contrast to cultural capital because rather than relying on navigating a culture embedded in dominant cultural practices, it gives richness to culture and experiences of traditionally underrepresented students and families that is learned at home (Riojas-Cortez, 2001; Rios-Aguilar & Kiyama, 2012; Rios-Aguilar, Kiyama, Gravitt, & Moll, 2011).

Similarly, Yosso's (2005) work regarding community cultural wealth that is often utilized "as a critical race theory (CRT) challenge to traditional interpretations of cultural capital" (p. 69), also places significance on the beneficial knowledge gained from families and communities outside of the school context. For Yosso (2005), too often "Communities of Color" are viewed in a deficit lens in that they lack information that is beneficial to the educational progress of

traditionally underrepresented students. In her work, examining community cultural wealth, Yosso (2005) argues that scholars should learn "from the array of cultural knowledge, skills, abilities and contacts possessed by socially marginalized groups that often go unrecognized and unacknowledged. "(p. 69). There are 6 forms of Community Cultural Wealth: aspirational, navigational, social, linguistic, familial, and resistant capital" (Yosso, 2005, p. 77). Collectively, all 6 forms constitute " an array of knowledge, skills, abilities and contacts possessed and utilized by Communities of Color to survive and resist macro and micro-forms of oppression" (p. 77). Keeping this in mind, funds of knowledge as well as community cultural wealth is a beneficial lens for understanding findings that illuminates the way in which families and communities of Northern California MCHS alumni provide access to information and college readiness resources in order to navigate the path to higher education.

Chapter 3

Methodological Approach

In this chapter, I outline the procedures I employed to answer the research questions that guide the quantitative and qualitative phases of this study. First, I restate the research questions and provide a data collection matrix that summarizes how each research question was addressed. Following, I introduce mixed methodology and explain why a sequential explanatory mixed method approach is best suited for this study. Finally, I present detailed information regarding the high school participants attended in order to put into context the high school and community college partnership that undergirds the college readiness experience of Northern California MCHS alumni included in this study.

In addition, when introducing the sequential explanatory mixed method design (including a visual representation of the procedural steps), I provide an overview of the data collection and data analysis procedures that are thoroughly discussed in chapter 4 (quantitative phase) and chapter 5 (qualitative phase). I offer a comprehensive description of the MCHS-ECHS relative to this work because not all MCHS-ECHS are the same, varying by organizational structure and partnership (Nakkula & Foster, 2007). By the closing of this dissertation, readers will walk away with insight into a MCHS-ECHS model and the outcomes of having participated in this college readiness program from a MCHS-ECHS student perspective.

Research Questions

This study is grounded in the following research questions:

Quantitative Phase

1.) What are the educational outcomes of Northern California MCHS alumni?

2.) How do Northern California MCHS alumni perceive their college preparation for 4-year institutions?

Qualitative Phase

1.) What does it mean to be college ready for Northern California MCHS alumni?

2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?

Table 1

Data Collection Matrix

Research Questions	Data Collection Sources	How did I access the data?
Quantitative Phase		
1.) What are the educational outcomes of Northern California MCHS alumni?	• MCHS-ECHS alumni survey	• I accessed the data via the MCHS-ECHS alumni survey that was administered through the closed Facebook group I created.
2.) How do Northern California MCHS alumni perceive their college preparation for 4-year universities?	• MCHS-ECHS alumni survey	• I accessed the data via the MCHS-ECHS alumni survey.
Qualitative Phase		
1.) What does it mean to be college ready for Northern California MCHS alumni?	• Semi-structured interviews with a sub-sample of Northern California MCHS alumni	• I accessed the data via semi-structured, in-depth interviews with a purposeful sample of Northern California MCHS alumni.
2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?	• Semi-structured interviews with a sub-sample of Northern California MCHS alumni	• I accessed the data via in-depth interviews with a sub-sample of Northern California MCHS alumni.

Overview of Mixed Methodology

This study is grounded in a mixed method research design. A mixed method approach consists of mixing quantitative and qualitative procedures and data at some point in the research process in order to gain a holistic understanding of a posed research problem (Creswell, 2009; Ivankova & Stick, 2007; Tashakkori & Teddlie, 2003). The underlying rationale for conducting a mixed method study is that neither quantitative nor qualitative procedures alone can provide an in-depth description of a research problem that is being investigated. For this reason, many scholars combine various methods to examine complex problems of interest and profound nuances in research findings without being restricted to one methodological technique (Creswell, 2012; Johnson, Onwuegbuzie, & Turner, 2007; Morse & Niehaus, 2009). Consequently, when combined, both procedures complement one another rather than serve as two competing methodologies (Hanson, Creswell, Clark, Petska, & Creswell, 2005). The unique structure of mixed method research fundamentally serves as a mechanism that bridges the never-ending confrontation between quantitative and qualitative paradigms, by showing that both are equally important to the development and implementation of research agendas (Plano-Clark & Creswell, 2008).

Considering mixed method research is complex, it comes as no surprise that there is more than one mixed method design. Currently, there are six commonly utilized mixed method approaches (Creswell, Plano-Clark, Gutmann, & Handson, 2003). Of the six major designs, three are sequential, meaning the methodological procedures are employed consecutively, with one procedure building on another. Alternatively, the remaining three mixed method designs are concurrent, meaning that the methodological procedures are employed simultaneously. Due to

the variation and complexity of mixed method studies, scholars suggest that researchers must have a good reason for employing a mixed method design and have knowledge in both quantitative and qualitative procedures (Creswell, 2009).

Furthermore, when designing a mixed method study, researchers must take into consideration the following: priority, implementation, and integration (Ivankova, Creswell, & Stick, 2006). When addressing priority, researchers must decide which methodological strand (or both, depending on the study) is given weight during the data collection and data analysis stage. Regarding implementation, researchers must address how the methodological strands are carried out: sequentially or concurrently. Finally, regarding integration, researchers must identify when both methodological strands will mix during the research study. By taking into account these three tenets, researchers are able to decide which mixed methodological approach best suits their research needs.

Sequential Explanatory Mixed Method Design

I employed a sequential explanatory mixed method design, which consists of two separate phases: The quantitative phase is implemented first followed by the qualitative phase (Creswell et al., 2003). During the first phase in particular, quantitative data are collected and analyzed. Subsequently, "qualitative (text) data are collected and analyzed second in the sequence and help explain, or elaborate on, the quantitative results obtained in the first phase" (Ivankova et al., 2006, p. 5). A sequential explanatory mixed method design is popular for its straightforwardness and is typically a valuable research method to implement when unforeseen results arise during the first phase of the quantitative analysis (Creswell, 2009). While it takes a great deal of time as well as financial resources to implement this mixed method design, the usefulness of this procedure allows scholars to provide a robust analysis combining multiple

research approaches in order to offer a comprehensive understanding of a problem of interest (Creswell, 2009).

As previously stated, more research is needed to understand the educational outcomes and first-hand experiences of MCHS-ECHS alumni. Current literature reveals that quantitative data alone do not provide a thorough account of what happens to MCHS-ECHS students upon graduating from high school and how students perceive their college readiness and transition to college. More importantly, our lack of knowledge regarding the high school to college transition and completion of MCHS-ECHS is far from substantiated. For this reason, this work relied extensively on the integration of quantitative and qualitative data to understand not only student matriculation after MCHS-ECHS but also the ways in which they perceive their college readiness and high school to college transition experience.

The sequential explanatory mixed method design is favored in this work and is best suited for this dissertation because the two-step approach provided the structure I needed to expand on and complement quantitative findings with a qualitative paradigm in the second phase of the research study. Particularly, I was able to administer a survey during the first phase of the study and follow up with a phenomenological inquiry in the second phase of the research study, utilizing semi-structured interviews with a purposeful sample of survey respondents to gain a deeper insight into Northern California MCHS alumni educational experiences. By doing so, I provide a detailed description of not only what secondary institutions students attended after Northern California MCHS but also how they perceived their high school experience in terms of contributing or not contributing to their college preparation as well as a smooth transition from high school to college.

Priority, Implementation, and Integration

In this work, priority is given to quantitative and qualitative strands. Both are critical in providing a holistic understanding of the matriculation, persistence, and degree completion of MCHS-ECHS alumni. Regarding how both methodological strands are implemented, this study is sequential, with one method employed after the other, and occurred in a 2-year time span. The first phase of this dissertation started with the collection of college readiness survey data from a sample of 45 Northern California MCHS alumni during a pilot study in spring 2012. The objective of the quantitative phase was to gain a general understanding of Northern California MCHS alumni perception of their college readiness process. Quantitative analysis revealed that further investigation of the college readiness process was warranted, particularly their preparation with regards to knowledge referring to contextual awareness and social supports. The unexpected findings led to the development and implementation of the qualitative phase of the dissertation study. In 2013, I employed a qualitative phenomenological procedure to interview a purposeful sample of survey respondents who had taken the MCHS-ECHS alumni survey in 2012. As such, the pilot study was extended. The purpose of the qualitative phase was to augment quantitative results by providing insight into college readiness and high school to college transition of Northern California MCHS alumni.

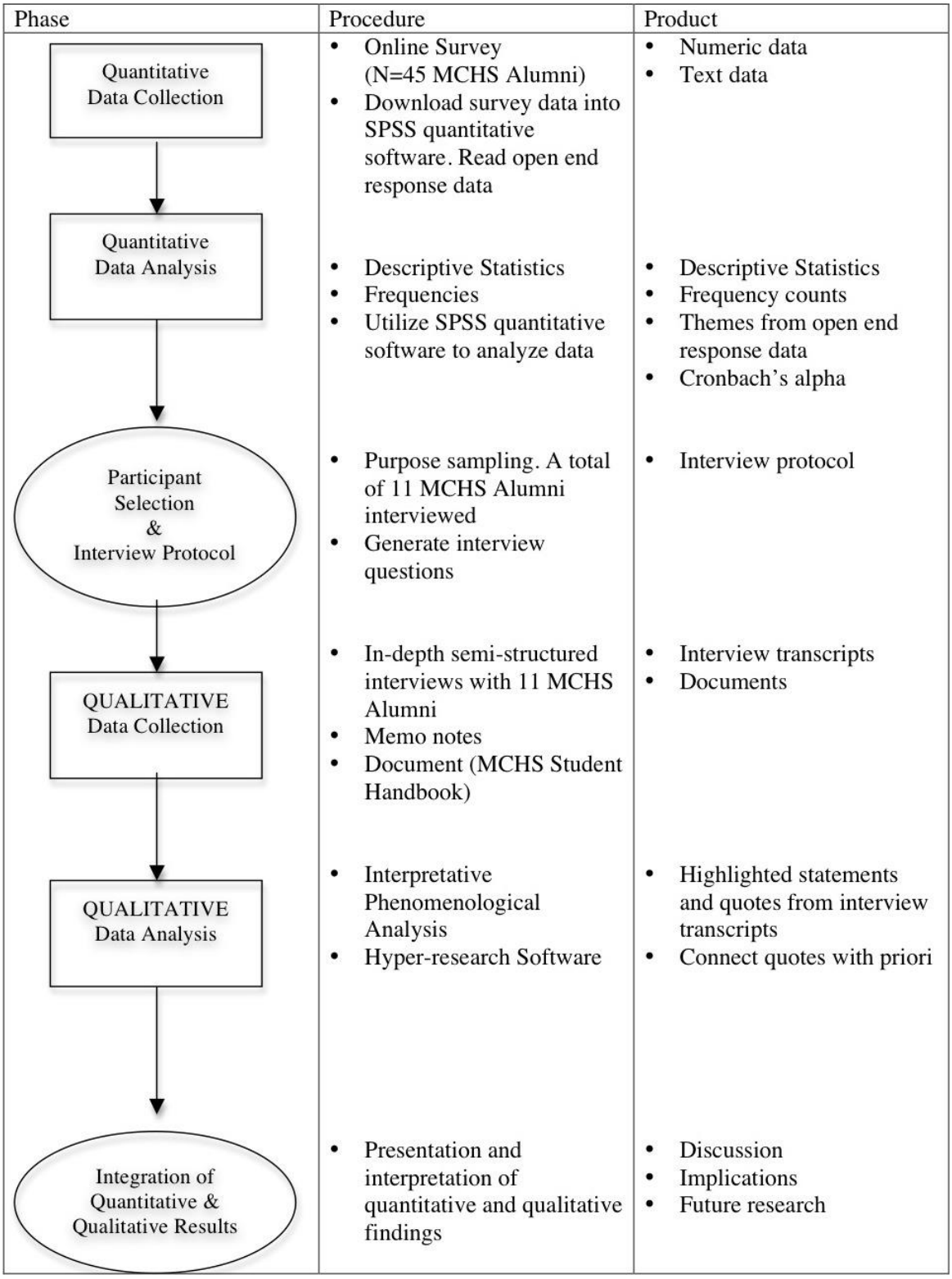
With regard to when the methods are integrated, the mixing of both quantitative and qualitative strands occurs at two distinct stages: mixing at the data collection level and subsequently mixing at the data interpretation level at the completion of the study. According to Plano-Clark and Creswell (2011), when mixing both quantitative and qualitative strands at the data collection level, "the researcher mixes by using a strategy of connecting where the results of

one strand build to the collection of the other type of data" (p. 67). The quantitative results were utilized to help build the data collection of the qualitative phase by specifically serving as a stepping stone that allowed me to incorporate survey constructs, results, and codes derived from open-ended responses in order to develop the interview protocol that was used to conduct in-depth, semi-structured interviews with a purposeful sample of 11 MCHS alumni for the phenomenological inquiry. Additionally, both quantitative and qualitative strands were mixed when a sub-sample of Northern California MCHS alumni who participated in the quantitative phase were selected and agreed to participate in the qualitative phase of this dissertation study.

Thereafter, the next phase of mixing occurs at the data interpretation level. Plano-Clark and Creswell (2011) posited that mixing at the data interpretation level " involves the researcher drawing conclusions or inferences that reflect what was learned from the combination of results from the two strands of the study, such as by comparing or synthesizing the results in a discussion" (p. 67). The implications and discussion section incorporates analysis of both quantitative and qualitative data in order to show instances where Northern California MCHS alumni felt prepared for the transition to college while alternatively revealing instances where they lacked critical college knowledge that could have altered their educational and career trajectory. Combined, priority, implementation, and integration led to the selection of the sequential explanatory mixed method approach that is employed in this work.

Figure 1

A visual representation of the sequential explanatory mixed method design



Context Matters

In the early 1980s, a Northern California school district and a local California community college developed a partnership that established a high school located on the community college campus. The high school is referred to in this work as Northern California MCHS. The partnership between the high school and the community college allows traditionally underrepresented students the opportunity to take college classes while in high school at no cost to them. Participating students can simultaneously earn their high school diploma and associate of arts degree, or their high school diploma and two years of college credit, by the time they complete high school. Northern California MCHS is an academic school with no athletics and few extracurricular activities, meaning Northern California MCHS does not have a sports team or participate in typical school activities you would ideally experience at a traditional high school (e.g., pep rallies, homecoming, etc.). However, if students are able to manage their high school and college curriculum while maintaining minimum GPA requirements, they are able to participate in sports activities at the high school they would have traditionally attended.

Unlike a typical high school that contains a population of more than 400 students in an academic year, Northern California MCHS keeps a relatively small school size, with no more than 300 students. The small school size is an interesting aspect of Northern California MCHS and allows students the chance to closely interact with peers, staff, and faculty at the college and high school level. Students get a chance to know each member of their entering cohort on a personal level, which is not typically the case at a traditional high school. Considering the commitment to maintaining a small school size, Northern California MCHS sustains an admissions practice. Because of this, not all students in the local school district are able to participate in the Northern California MCHS program. Prospective students must apply and be

admitted. Information regarding how to apply to Northern California MCHS is made available via presentations at local junior high schools given by current Northern California MCHS students and junior high school counselors. Additionally, applications for admissions are available for pickup at the Northern California MCHS office. For the academic school year of 2011-2012, admission into Northern California MCHS was guided by the following criteria:

1. Academic scores in the areas of reading, writing, and math
2. Student maturity as well as independence
3. Commitment to education as a priority over recreational activities
4. Counselor recommendation
5. Student personal statement
6. Parent personal statement
7. Teacher recommendation

The goal of Northern California MCHS is to provide students with academic, social, and cultural preparation for college or the workforce. Academic preparation refers to an advanced curriculum that is infused with college coursework to provide students with the chance to experience college course expectations, requirements, and structure. As a perk, Northern California MCHS students are given priority over community college students when registering for classes. Social and cultural preparation refers to mechanisms that provide students with the support and knowledge needed regarding college culture, college expectations, and typical college norms. For example, the structure of the academic school year schedule of Northern California MCHS is uniquely different from a traditional high school schedule. Mainly, Northern California MCHS is structured to follow the academic schedule of the California community college. Because students are allowed to experience the academic schedule of a community

college, they are able to understand ways in which college classes are structured and conducted. This includes becoming familiar with community college policy, college prerequisite course requirements, and college course enrollment/drop deadlines.

Furthermore, through the partnership students are allowed to take college classes alongside community college students and share the same community college resources. This includes but is not limited to the community college career center, transfer center, counseling services, and extracurricular activities. As a result, students gain access to college resources and support that can play a critical role in showing students what steps should be completed to navigate a path to a particular career or 4-year institution. Additionally, Northern California MCHS students are required to schedule an appointment with a college counselor to discuss transfer articulation agreements and associate degree requirements. By doing so, students are made aware of the opportunities available to them and ways to best move forward with college transfer or career goals.

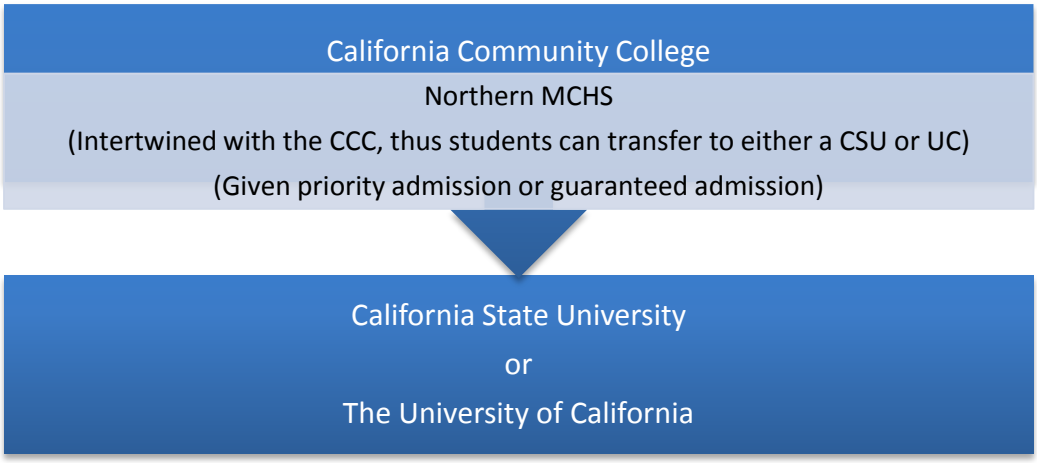
Lastly, the partnership is unique because it situates Northern California MCHS within the larger context of the higher education system in California. The California Master Plan for Higher Education (1960) is a governing document that was approved by The Regents and State Board. The implementation of the Master Plan resulted in the creation of a three-tier California higher education system that includes the University of California (UC), California State University (CSU), and California Community Colleges (CCC). Each postsecondary institution identified has its own sets of missions, purpose, and admissions practices. The UC system is identified as California's major research universities, the CSU system is geared toward undergraduate and graduate education but with less focus on research endeavors, and finally CCCs are recognized for vocational training and as a stepping stone for students seeking to

complete lower-division and upper-division degree requirements prior to transferring into a UC or CSU (University of California Office of the President, 2009).

Within the California Master Plan for Higher Education, CCC transfer students are given priority admission over freshmen applicants in the UC and CSU admission process. Additionally, participating UC and CSU campuses offer CCC transfer students guaranteed admission if specific academic requirements are met through the Transfer Admission Guaranteed Program (University of California, 2014). Northern California MCHS is part of a community college campus, and its students are identified as community college students. For this reason, students are able to navigate the three-tier system as transfer students, making it possible for them to have priority admission over freshmen students in the UC and CSU admission process (see figure 2). Additionally, Northern California MCHS students are able to participate in the Transfer Admissions Guaranteed Program and have guaranteed admission into a UC or CSU upon completing their high school program.

Figure 2

Visual of Northern MCHS and Community College Organizational Structure



Demographic Information

The high school itself is located in a predominantly minority school district. As shown in table 2, the district where Northern California MCHS is located was more than 50% minority in the 2011-2012 academic school year, representing a majority Hispanic and African American student population. More than half of the student population in the district qualified for free or reduced-price lunch, and less than half were identified as English Learners. Northern California MCHS similarly resembles the same demographics as the district where it is housed: the majority of its student population are minorities, with Hispanic and African American students making up more than 50% of the student body during the 2011-2012 academic school year.

Although there were no English Learners at Northern California MCHS during the aforementioned school year, slightly less than 50% qualified for free or reduced-price lunch. In the fall of 2011, the majority of the student population of the community college where Northern California MCHS is housed are students of color. The racial/ethnic demographic is as follows and listed with the highest percentage presented first: Hispanic 31.43%, African American 26.07%, Asian 13.35%, White 12.92%, Filipino 6.23%, Unknown 6.26%, Multi-Ethnic 2.68%, Pacific Islander 0.69%, and American Indian/Alaska Native 0.38%.

Table 2

High School, District, and County Demographics

Demographics	Northern California MCHS	District	County
American Indian or Alaska Native	0.4%	0.2%	0.4%
Asian	14.4%	10.6%	10.7%
Native Hawaiian or Pacific Islander	1.1%	0.7%	0.7%
Filipino	11.6%	5.7%	4.1%
Hispanic or Latino	41.8%	50.4%	32.1%
Black or African American	22.5%	20.5%	10.5%
White	8.4%	11.1%	36.9%
English Learners	0.0%	32.7%	17.1%
Free/Reduced Lunch	46.7%	63.9%	37.0%

Source: High school, District and County Data[4]

Educational Plan: High School and Community College

A typical MCHS student at Northern California MCHS fulfills an educational plan that satisfies both high school and community college graduation requirements. The Northern California MCHS curriculum is college preparatory A-G high school subject curriculums, which consist of certified core subjects required for admission into UCs and CSUs. According to the University of California, an A-G curriculum is "a pattern of 15 college-preparatory courses drawn from the areas of history/social science, English, math, lab science, a language other than English, the visual and performing arts and the college-preparatory elective" (University of California, 2014). It is used as a measure to examine subject matter preparation and analytical abilities that are accepted as part of the freshman admission process by the University of California. By the time Northern California MCHS students complete high school, they should

[4] In order to keep the location of the school anonymous according to the Institutional Review Board guidelines, the high school, district and community college demographic source are not referenced.

have completed the certified high school coursework to satisfy the minimum academic freshman admission requirements accepted by the UC and CSU campuses. With regard to college courses, Northern California MCHS students must enroll in a minimum of 11 college credits and maintain a grade point average of 2.5 or above. The community college courses are transferrable courses that align with the Intersegmental General Education Transfer Curriculum (IGETC). IGETC "is a series of courses that California community college students may complete to satisfy the lower-division breadth/general education requirements at both UC and the California State University"(University of California, 2014). Each semester, Northern California MCHS students take both college courses as well as high school courses (see figure 3) and must maintain a GPA above 2.8.

Figure 3

Example of a Northern California MCHS Student Educational Plan

GRADE 9 (Fall Semester)	**GRADE 9 (Spring Semester)**
MCHS High School Coursework	**MCHS High School Coursework**
English 1 [P]	English 1 [P]
Cultural Geography [P]	Cultural Geography [P]
Algebra 1 or Geometry [P]	Algebra 1 or Geometry [P]
Biology [P]	Biology [P]
Early College Seminar	Early College Seminar
PE	PE
Community College Coursework	**Community College Coursework**
Drama (T)	Counseling (T)
Bus Office Tech (T)	Health (T)

Figure (continues)

Figure (continued)

GRADE 10 (Fall Semester)	GRADE 10 (Spring Semester)
MCHS High School Coursework	**MCHS High School Coursework**
English 2 [P]	English 2 [P]
CCC Math	CCC Math
Spanish 1 or 2 [P]	Spanish 1 or 2 [P]
World History [P]	World History [P]
Early College Seminar	Early College Seminar
PE	PE
Community College Coursework	**Community College Coursework**
Speech (T) & IGETC	Physics + Physics Lab (T) & IGETC
Admin. Of Justice (T)	CIS (T)

GRADE 11 (Fall Semester)	GRADE 11 (Spring Semester)
MCHS High School Coursework	**MCHS High School Coursework**
English 3 [P]	English 3 [P]
US History [P]	US History [P]
CCC Math	CCC Math
Spanish 2 or 3 [P]	Spanish 2 or 3 [P]
Early College Seminar	Early College Seminar
Expository Reading/Writing	Expository Reading/Writing
Community College Coursework	**Community College Coursework**
Chem & Chem Lab IGETC	Humanities (T) & IGETC
History (T) IGETC	Drama (T) IGETC

Figure (continues)

Figure (continued)

La Raza (T) IGETC	CCC Elective
GRADE 12 (Fall Semester)	**GRADE 12 (Spring Semester)**
MCHS High School Coursework	**MCHS High School Coursework**
Economics [P]	American Government [P]
English 4 [P]	English 4 [P]
CCC Math	CCC Math
Early College Seminar	Early College Seminar
Senior Project	Senior Project
Community College Coursework	**Community College Coursework**
Political Science (T) & IGETC	Biology & Bio Lab (T) & IGETC
English B (T)	English (T) & IGETC
CCC elective in major	CCC elective in major
Fifth Year (Fall Semester)	**Fifth Year (Spring Semester)**
Major requirements/IGETC transfer requirements	Major requirements/IGETC transfer requirements

Source: Author's notes, 2013[5]

Limitations

While the results of the study are interesting and provide information about the perception of Middle College alumni preparation for college, the study had limitations. In particular, there were data limitations that need to be addressed. First, with regard to data, this study only included graduates of one Middle College High School in Northern California, thus this study does not compare data to other graduates of MC-EC and is not generalizable to all

[5] Curriculum information is derived from published brochures for the Northern California MCHS relative to this study. For the purpose of institutional review board requirements, I cannot cite the brochure.

MC-EC on a national scale. Second, the Facebook page I developed in 2008 to recruit participants for the study was useful, but inclusion criteria only took into consideration Northern California MCHS alumni who graduated from Northern California MCHS and have completed or are in the process of completing their postsecondary degree. Consequently, students who did not enroll in a 4-year institution, or enrolled at a later time after the study was launched, were not included.

Third and finally, it should be noted that although Facebook served as a critical access point to recruit alumni, it also served as a limitation in this study. Specifically, Facebook does not allow users to send out multiple messages of the same or similar content to users in an effort to reduce or eliminate spam. I was prompted to stop sending survey invites to participants or have my Facebook account deleted as a consequence. This limited me from further administering my survey to possible participants included in the Northern California MCHS alumni group I created.

Summary of the Context

The context of Northern California MCHS is distinctively unique to the educational experiences of the participants included in this study. The organizational structure, academic curriculum, and social supports provide an ideal solution to address issues impacting the high school to college pipeline for traditionally underrepresented students. Although Northern California MCHS admits few students into the program, underrepresented students who are admitted receive the same academic, social, and cultural preparation for college. Students are automatically enrolled in an advanced academic curriculum that essentially can lead to matriculation, degree completion, or entry into the workforce. Interestingly, however, the extent to which the former claim is upheld is in question, mainly because minimal research examines

MCHS-ECHS college or career trajectory after high school. Consequently, research regarding the educational outcomes of Northern California MCHS included in this study has yet to be examined. Through the utilization of a sequential explanatory mixed method design, grounded in both quantitative and qualitative paradigms, the gap regarding what is unknown about the educational outcomes and student perception of their college readiness experience, especially at Northern California MCHS, is minimized. This pilot study introduces new mechanisms for examining student MCHS-ECHS college readiness as well as enrollment, persistence, and degree completion of traditionally underrepresented students.

Chapter 4

Quantitative Phase

Data Collection

The quantitative phase of the study utilized data from an online pilot survey of 45 Northern California MCHS alumni. The pilot study was initiated in order to develop a study that captures the educational outcomes of Northern MCHS alumni and their perception of their preparation for college. The survey was created through Survey Gizmo, an online survey software that only I had access to, and is grounded in the theoretical frameworks that guide the study, which include David Conley's (2007) comprehensive college readiness framework, social capital theory, and social network theory. After the survey was developed, I generated a specific URL and subsequently administered the survey link beginning in January 2012 through the closed Facebook group I created. The survey remained open for four months, and a survey reminder was administered once a week until the designated response rate was met for the pilot study. The goal of the pilot study was to accumulate 30 responses. However the number of responses received exceeded 30, thus the response rate was 50%. Of 193 students that received the survey invitation, a total of 45 respondents who met the designated criteria completed the survey.

Survey Content Items. In total there were four content areas: key content areas, the display of certain academic behaviors and cognitive skills, knowledge regarding contextual skills, and awareness and social support. When combined, the four content areas yielded 36 items. As shown in table 3, key content area consisted of 6 items, the academic behavior and cognitive strategies consisted of 6 items, and contextual skills and awareness consisted of 12 items. The social capital construct addressed student, faculty, and teacher support for class assignments at Northern California MCHS and consisted of 12 items.

Survey Scales and Items. Using a 5-point Likert-type scale, students were asked to rate seven statements regarding how well they felt their MCHS-ECHS program prepared them for key content areas (1—not prepared at all, 2—somewhat prepared, 3—moderately prepared, 4—high prepared, 5—not applicable). Additionally, using a 5-point Likert-type scale, students were asked to rate six statements regarding how they felt their MCHS-ECHS program prepared them for certain academic behaviors and key cognitive skills (1—not at all, 2—very little, 3—somewhat, 4—to a great extent, 5—almost always). Subsequently, using a different 5-point Likert-type scale, students were asked to rate 12 statements regarding the extent to which they developed college knowledge (1—strongly disagree, 2—disagree, 3—neutral, 4—agree, 5—strongly agree). Finally, using a 5-point Likert-type scale, students were asked to rate 12 statements regarding peer interactions at the high school and college level and social supports they experienced while at Northern California MCHS (1—never, 2—rarely, 3—sometimes, 4—most of the time, 5—always).

Table 3

College Readiness and Social Capital Content Item Map

Construct Map					
Content Items	Number of Items	Items	Scale	Range	Selection Options
College Readiness					
Key Content Area	6	18a, 18b, 18c, 18 e, 18f, 18g	Likert	(1-5)	1—not prepared at all, 2—somewhat prepared, 3—moderately prepared, 4—high prepared, 5—not applicable
Academic Behavior & Cognitive Strategies	6	19a, 19b, 19c, 19d, 19e, 19f	Likert	(1-5)	1—not at all, 2—very little, 3—somewhat, 4—to a great extent, 5—almost always

Table (continues)

Table (continued)

Contextual Skills & Awareness	12	22a, 22b, 22c, 22d, 22e, 22f	Likert	(1-5)	1—strongly disagree, 2—disagree, 3—neutral, 4—agree, 5—strongly agree
Social Capital					
Social Supports	12	20a, 20b, 20c, 20d, 20e, 20f, 21a, 21b, 21c, 21d, 21e, 21f,	Likert	(1-5)	1—never, 2—rarely, 3—sometimes, 4—most of the time, 5—always

Sampling

The participants included in this study are alumni from Northern California MCHS. The sample was selected via convenience sampling through a Facebook group I created in 2008. My status as a Northern California MCHS alumna (described in the self-reflexive statement in the data analysis section of this dissertation) and the relationships I maintained after high school gave me the leverage I needed to generate a Facebook group. There is no systematic way to track MCHS-ECHS alumni post high school. Thus establishing alternative mechanisms to reach Northern California Alumni for this work was critical. My status as a Northern MCHS Alumni allowed me the ability to create a Facebook group that served as the primary recruitment mechanism to reach out to participants that included in this work. Over a period of three years (2008-2011), 193 people joined the Facebook group; this included current Northern California MCHS students, alumni, and administrators. Due to the purpose of the study of understanding Northern California MCHS alumni college readiness and transition into college, only alumni were recruited to take the survey. Thus I set parameters. In order to participate in the study, students in the Facebook group had to meet one of the following criteria:

a) Students had to be currently enrolled in a four-year institution.

b) Students had to have graduated from a four-year institution.

The criteria were important because I wanted to gain a retrospective approach from Northern MCHS Alumni that have graduated from or are currently in postsecondary institutions. This technique allowed respondents the space to reflect upon their high school and college experiences to put into perspective what college readiness processes impacted their educational progress. As previously mentioned, a total of 45 students participated in the pilot study in 2012.

Participant Demographics

Ash shown in table 4, a greater percentage of women than men completed the survey (57.8% vs. 37.8%, respectively), and 4.4% of the participants preferred not to answer the question pertaining to their gender classification. In regards to race/ethnicity, the participant sample represented diverse backgrounds. The racial/ethnic breakdown follows and is listed by highest representation: Black/African American (35.6%), Asian/Pacific Islander (31.1%), Hispanic (13.3%), other/multi-racial (8.9%), Caucasian (4.4%), and 6.7% declined to respond. The majority of students were not the first in their family to attend college, thus there is a lower percentage of first-generation college students represented in the pilot study compared to non-first-generation college students (42.2% vs. 57.8%, respectively). Forty percent of the participants grew up in a single-parent household versus 53.3% who grew up in a two-parent household 6.7% preferred not to answer the question about their parental household structure. As shown in table 5, the following Northern California MCHS alumni cohorts are represented: 1994, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2011. It should be reiterated that variation in cohort representation might skew the data. Case in point: Over time, as with any organization, teacher and staff administration might change, which presents sets of experiences that are different for each individual cohort. As such, variation in participants' responses is

expected. In addition, keep in mind that the sample size and sample population restriction does not allow me to make comparisons. Results should be interpreted with caution.

Table 4

Participant Demographics

Demographic and Background Information of Survey Respondents (n=45)

Variables	N	%
Gender		
Male	16	39%
Female	25	56.1%
Prefer not to answer	2	4.5%
Race and Ethnicity		
Asian/Pacific Islander	14	31.8%
Black/African American	15	34.1%
Hispanic	6	13.6%
Other/Multi-Racial	4	9.1%
Caucasian	2	4.5%
Declined to respond	3	6.8%
Native American or Alaskan Native	0	0%
First-Generation Status		
Table (Cont'd)		
Yes	18	40.9%
No	26	59.1%
Prefer not to answer	0	0%
Transfer Status		
Freshman	7	15.9%
College Sophomore	11	25%
College Junior	18	40.9%
College Senior	1	2.3%
Transfer Student	7	15.9%

Source: Middle College High School Alumni Survey, 2012; Author's Calculations.

Table 5

Northern California MCHS Cohort (graduation year) Breakdown

Cohort	N
1994	1
2003	3
2004	4
2005	1
2006	7
2007	8
2008	9
2009	5
2010	2
2011	5
Total	45

Source: Middle College High School Alumni Survey, 2012; Author's Calculations.

Survey Validity and Reliability

Survey research often calls for the validation and reliability of survey instruments that are administered to participants in a given study (Rattray & Jones, 2007). According to Tavakol and Dennick (2011), "validity is concerned with the extent to which an instrument measures what it is intended to measure [and] reliability is concerned with the ability of an instrument to measure consistently" (p. 53). Establishing both is critical in order to reduce or eliminate errors that can possibly occur in a research study. The following procedures were utilized to determine reliability and validity of the survey items presented in this work: content validity, cognitive interviewing, item-total correlation, and Cronbach's alpha.

Content Validity and Cognitive Interviewing

The first phase of survey reliability involved establishing content validity, which is defined as "the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose" (Haynes, Richard, &

Kubany, 1995, p. 239**).** Because there is no single college readiness construct that has been established or replicated, it was critical for the scales to undergo content validation. Senior experts in the field of access to higher education and experts familiar with college readiness literature examined the survey to ensure the items listed were measuring the following content items that are relevant to this study: knowledge in key content areas, the display of certain academic behaviors and cognitive strategies, contextual skills and awareness, and social supports. Items were deleted from the pilot survey if they did not align with college readiness or social capital literature. After content validity was established, the survey went through a series of cognitive interviews.

Cognitive interview methodology is often employed in research prior to the administration of a survey to check for possible threats to survey validity and reliability. Specifically in a cognitive interview, the researcher randomly selects a few participants from their sample to read the survey items aloud and provide answers while thinking aloud the process for their answer selection. From this exercise, the researcher is able to probe questions by asking participants if they did or did not understand the survey item they answered and make adjustments to the survey prior to it being administered (Desimone & Le Floch, 2004). Due to the size of the sample population, only two students were randomly selected to participate in the cognitive interviews. At the conclusion of the cognitive interviews, no additional items were included. Instead, statements were reworded and terminology that was unfamiliar to the participants was eliminated to ensure participants did not have difficulty responding to items on the survey.

Internal Consistency Reliability

Item Total Statistics & Corrected Item-Total Correlation. All survey items were examined to determine if any items in a given content area were not consistent with the overall constructs of interest in this study, and whether items should be included in the averaged measure, by examining item-total statistics. Particularly within the item-total statistics table, corrected item-total correlation was examined. For items that fell below the corrected item-total correlation cutoff, <0.30, essentially not adding to the "explanatory power of the measure or subscale" (Rattray & Jones, 2007, p. 237), replacing the item was considered. This is because researchers contend that items that fall below <0.30 should be removed (Rattray & Jones, 2007). However, this assessment is at the discretion of the researcher. Scholars suggest if the removal of them significantly increases the Cronbach's alpha, then it should be deleted. Conversely, if the item is a critical measure within a given construct that addresses the research questions, it should remain "despite poor psychometric analysis" (Rattray & Jones, 2007, p. 237).

Items within the following constructs were examined: key content areas (7 items), academic behavior and cognitive skills (6 items), contextual skills and awareness (12 items), and social supports (12 items). No items were worded negatively that needed to be changed, and all items had positive item-total correlations, with the exception of two items in the key content construct. Two items in the key content knowledge construct, reading workload and language, fell below <0.30 (0.191 and 0.254, respectively). Reading workload was the only item removed because it increased the Cronbach's alpha considerably, more than the removal of the item language other than English (see table 6), and therefore it was no longer included in the dissertation study or analysis. This reduced the key content construct to 6 items.

Table 6

Key Content Area: Item-Total Statistics

Item-Total Statistics					
Content areas	Content area Mean if Item Deleted	Content area Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Math	20.47	12.436	0.322	0.179	0.594
Science	20.20	12.164	0.337	0.234	0.589
Writing	20.33	12.273	0.429	0.419	0.567
Reading Workload	20.62	12.877	0.191	0.370	0.635
Humanities (ex: Art, Drama)	20.33	11.091	0.467	0.282	0.544
Language Other than English (ex: French, Spanish)	20.24	11.553	0.254	0.250	0.628
Social Sciences (ex: Sociology, Psychology, Political Science)	20.33	11.591	0.433	0.339	0.558

Cronbach's Alpha. Researchers contend that a Cronbach's alpha, the "reliability associated with the variation accounted for by the true score of the underlying construct" (Santos, 1999, p. 2), should have a score of 0.70 or above (Nunnally & Bernstein, 1994; Santos, 1999; Tavakol & Dennick, 2011). For the constructs of interest to this study—key content areas, the display of certain academic behaviors and cognitive skills, contextual skills and awareness, and social supports—Cronbach's alpha was calculated and reported. The Cronbach's alpha for the knowledge in key content scale was relatively low (0.635), but this does not necessarily indicate the scale has low internal consistency reliability. The reason for the low value may be an indicator that there are not enough items in the construct (Tavakol & Dennick, 2011) or the scale itself did not measure key content respective to participants' major field, despite undergoing content validity. The Cronbach's alphas for the remaining scales are reasonably high, ranging

from 0.765 to 0.889, indicating mid- to high-internal consistency reliability. Specifically, the Cronbach's alpha for the content items relating to academic behaviors and cognitive skills is 0.886, contextual skills and awareness items is 0.889, and social supports is 0.765.

Data Analysis

Survey data were analyzed using descriptive statistics and frequency distributions to provide a general overview of student educational outcomes after Northern California MCHS and student perception of their college readiness and social support. Particularly, frequency distributions were utilized to examine student responses to the extent to which they felt Northern California MCHS provided academic preparation for the following: key content areas, academic behaviors and cognitive skills, and contextual skills and awareness. Finally, social support received by students during their time at Northern California MCHS was examined utilizing frequency distributions. The survey also consisted of open-ended responses. Open-ended responses were analyzed utilizing an open-ended coding technique that consisted of the following steps: creating a list of terms that are relative to the overarching theoretical underpinnings of the study, developing categories from the list of identified terms, and coding each open-ended response within the respective categories (Goodrich, 2008). The open-ended results are subsequently presented after the descriptive statistical analysis.

Quantitative Results and Discussion

The following section provides detailed information of the quantitative results that were calculated utilizing descriptive statistical analysis and open-ended survey coded strategies. Recall the purpose of this dissertation is to employ a pilot study to gain a sense of the outcomes of MCHS-ECHS, as well as their perception of their college readiness. As such, this study is not inferential, but rather descriptive. The following research questions were of interest:

Quantitative Phase

1.) What are the educational outcomes of Northern California MCHS alumni?

2.) How do Northern California MCHS alumni perceive their college preparation for 4-year institutions?

Northern MCHS Student Educational Outcomes

The first research question, *What are the educational outcomes of Northern California MCHS alumni?,* was employed to examine what happens to MCHS-ECHS students upon graduating high school, what happens during their transition from high school to college, and more importantly, what the possible MCHS-ECHS postsecondary degree completion patterns are. As such, participants responded to questions pertaining to their college coursework completed, enrollment in four-year institutions, and postsecondary degree attainment.

College Coursework: College Credits Accumulated. Recall Northern California MCHS students begin taking college classes as early as ninth grade. Descriptive statistics reveal that on average students accumulated 63 semester college credits upon graduating from Northern California MCHS, and more than half of Northern California MCHS alumni in this study received their associate of arts degree upon graduating from MCHS (64.4% received their AA

degree vs. 35.6% did not receive their AA degree, respectively). Although a smaller percentage of Northern California MCHS alumni indicated that they did not receive their AA degree, students graduated from high school with a substantial amount of college credits accumulated over a period of four years. All students were enrolled or have graduated from a public or private 4-year institution. Data reveal that most (93.3%) of the participants were able to transfer their college credits to their undergraduate institution. Only 4.4% of the participants indicated that they were not able to transfer their college credits.

Postsecondary Degree Enrollment. The postsecondary institutions Northern California MCHS alumni are currently attending or have attended include private as well as public 4-year institutions: California State University–Chico, California State University–East Bay, California State University–Sacramento, Columbia University, Hampton University, Howard University, Humboldt State University, Kennesaw State University, Oberlin College, Saint Mary's College of California, San Francisco State University, San Jose State University, Stanford University, University of California–Berkeley, University of California–Davis, University of California–Irvine, University of California–Los Angeles, University of California–Santa Barbara, University of California–Santa Cruz, University of Richmond, and University of Tampa.

College Readiness

This work also examined Northern California MCHS alumni perceptions of their college readiness, particularly regarding college readiness tenets outlined in David Conley's (2007) comprehensive college readiness framework: key content subject areas, academic behaviors and cognitive skills, and contextual skills and awareness. The data presented in the subsequent section address the second research question in this dissertation: *How do Northern California MCHS alumni perceive their college preparation for 4-year institutions?* Mainly, respondents

were asked whether being at Northern California MCHS and taking college coursework while in high school prepared them for college courses in respective subject areas at their undergraduate university, equipped them with the necessary academic behaviors and cognitive skills to thrive academically in their 4-year institution, and assisted them in the development of college knowledge regarding how to apply to 4-year institutions. Although MCHS-ECHS are designed as their own entity, differing in organizational structure (Nakkula & Foster, 2007**),** key findings from this study can illuminate the possible benefits of having participated in this program model.

***College Preparation in Key Content Subject Areas*.** Respondents were asked to indicate the extent to which they felt taking college courses while in high school prepared them for college coursework in specific subject areas, including math, science, writing, humanities, language, and social sciences. The answer selection ranged from "not prepared at all" to "highly prepared." If students did not complete a course in one of the respective subject areas, they were prompted to select "not applicable." To make for easier reporting, the response categories "somewhat prepared" and "moderately prepared" were combined, considering the terminology (*somewhat* and *moderately*) utilized in the response selection is synonymous. Data are presented with highest percentages reported first. Listing percentages in descending order provides a detailed review of where participants' responses lie on the designated scale.

As shown in table 6, in the subject area of math, the highest percentage of respondents (48.9%) felt moderately prepared or somewhat prepared for math, 44.4% felt highly prepared, and 2.2% felt not prepared at all; 4.4% indicated not applicable. Regarding science, a slightly higher percentage of respondents (42.2%) felt moderately prepared or somewhat prepared, 40% felt highly prepared, and 2.2% felt not prepared at all; 15.6% indicated not applicable. When examining writing, more than half of the respondents (55.6%) indicated that they felt highly

prepared, while 42.2% felt moderately prepared or somewhat prepared, and 2.2% indicated not applicable. None of the respondents indicated that taking college courses while in high school did not prepare them at all for college writing. With regards to the humanities, more than half of the respondents (53.4%) reported that they felt moderately or somewhat prepared, 26.7% felt highly prepared, and 2.2% felt not prepared at all; 17.8% indicated not applicable. With regard to languages other than English, a higher percentage of the respondents (44.5%) felt moderately or somewhat prepared, 31.1% indicated not applicable, 17.8% felt highly prepared, and 6.7% indicated not prepared at all. Lastly, regarding the social sciences, most of the respondents (46.7%) felt moderately prepared or somewhat prepared, 37.8% felt highly prepared, and 11.1% indicated not applicable; roughly 4% indicated that they were not prepared at all.

A key takeaway from the key content section is that Northern California MCHS alumni typically felt academically prepared for courses in their respective program as a result of taking a college course in that designated area while in high school. Current literature only pinpoints the type of classes that are taken by MCHS-ECHS students (Spence & Barnett, 2008) and does not consider whether students felt prepared in their respective academic areas. However, the key content findings presented in this work unmask how students that transitioned into college felt about their preparation in course subjects now that they have graduated from their respective 4-year institution.

Table 7

Key Content Area

Items	Not Prepared at All	Somewhat Prepared	Moderately Prepared	Highly Prepared	Not Applicable	Total
Math	2.2% (1)	20% (9)	28.9% (13)	44.4% (20)	4.4% (2)	100% (45)

Table (continues)

Table (continued)

Science	2.2% (1)	11.1% (5)	31.1% (14)	40% (18)	15.6% (7)	100% (45)
Writing	0% (0)	17.8% (8)	24.4% (11)	55.6% (25)	2.2% (1)	100% (45)
Humanities (ex: Art, Drama)	2.2% (1)	15.6% (7)	37.8% (17)	26.7% (12)	17.8% (8)	100% (45)
Language Other than English (ex: French, Spanish)	6.7% (3)	15.6% (7)	28.9% (13)	17.8% (8)	31.1% (14)	100% (45)
Social Sciences (ex: Sociology, Psychology, Political Science)	4.4% (2)	8.9% (4)	37.8% (17)	37.8% (17)	11.1% (5)	100% (45)

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

Academic Behaviors and Cognitive Skills. The next college readiness tenet asked respondents the extent to which they felt they developed academic behaviors and cognitive skills while at Northern California MCHS that helped them prepare for the academic demands and expectations within a 4-year college setting. Academic behaviors and college skills include

a.) time management,

b.) study skills (for college exams and assignments),

c.) responsibility and confidence to handle college coursework, and

d.) critical thinking skills.

As table 7 indicates, with the exception of time management skills, respondents typically felt that they to a great extent or almost always developed study skills for college exams and assignments, developed confidence in their ability to perform college coursework, felt they had become a

responsible student, and developed critical thinking skills while at Northern California MCHS that helped them prepare for demands within a postsecondary setting.

More than half of the respondents indicated that they somewhat developed, developed very little, or did not develop time management skills at Northern California MCHS that helped them prepare for college demands (44.4%, 6.7%, and 4.4%, respectively). Fewer reported that they developed to a great extent or almost always developed time management skills (26.7% and 17.8%, respectively). When taking into consideration whether respondents felt they developed study skills while at Northern California MCHS that helped them prepare for college exams, 48.9% of the respondents indicated to a great extent, 22.2% indicated somewhat, 15.6% indicated almost always, 11.1% indicated very little, and 2.2% indicated not at all. Along the same line, respondents were asked if they felt they developed study skills while at Northern California MCHS that helped them prepare for college assignments. More than fifty percent of the respondents (51.1%) reported to a great extent, 22.2% reported somewhat, 17.8% reported almost always, 6.7% reported very little, and 2.2% reported not at all.

One aspect of academic behaviors that was examined was respondents' perception of their ability to perform college-level work and sense of responsibility as a college student. When examining respondents' confidence in their ability to perform college level work, 46.7% of the respondents reported to a great extent, 33.3% reported almost always, 17.8% reported somewhat, and 2.2% reported very little. None of the respondents indicated not at all. When reporting whether respondents felt they had become a responsible college student as a result of being at Northern California MCHS, 40% of the respondents indicated to a great extent, 28.9% indicated almost always, 28.9% indicated somewhat, and 2.2% indicated very little. None of the respondents indicated not at all. Lastly, regarding the development of critical thinking skills

while at Northern California MCHS, 37.8% reported to a great extent, 33.3% reported somewhat, 24.4% reported almost always, and 4.4% reported very little. None of the respondents indicated not at all.

The underlying purpose of the statements included in this construct was to further examine, of all the ways in which Northern California MCHS equipped students with the necessary academic behaviors and skill sets needed to manage the high school and college workload simultaneously, which impacted their academic behaviors in a 4-year college setting. By tapping into student perception of their academic behaviors and skill sets, we get a glimpse of what resources or skill set training was made available at Northern California MCHS that inevitably played a role in student preparation for college exams and assignments. From this section, you can take away that Northern California MCHS provided participants with study skill training and a reasonable amount of time management training. More importantly, you get a glimpse of participants' confidence in their ability to perform college-level work, which hints that Northern California MCHS provided an environment that was conducive to the development of participants' ability to navigate a college setting. The findings also suggest that Northern California MCHS offered the necessary context that enabled students to gain a sense of independence and maturity, responsibility, and critical thinking skills.

Table 8

Academic Behavior and Cognitive Skills

Items	Not at All	Very Little	Somewhat	To a Great Extent	Almost Always	Total
I developed time management skills.	4.4% (2)	6.7% (3)	44.4% (20)	26.7% (12)	17.8% (8)	100% (45)

Table (continues)

Table (continued)

I developed study skills that helped me prepare for college exams.	2.2% (1)	11.1% (5)	22.2% (10	48.9% (22)	15.6% (7)	100% (45)
I developed study skills that helped me prepare for college assignments.	2.2% (1)	6.7% (3)	22.2% (10)	51.1% (23)	17.8% (8)	100% (45)
I developed confidence in my ability to perform college coursework.	0% (0)	2.2% (1)	17.8% (8)	46.7% (21)	33.3% (15)	100% (45)
I felt I had become a responsible student.	0% (0)	2.2% (1)	28.9% (13)	40% (18)	28.9% (13)	100% (45)
I developed critical thinking skills.	0% (0)	4.4% (2)	33.3% (15)	37.8% (17)	24.4% (11)	100% (45)

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

Contextual Skills and Awareness: College Knowledge. The final construct in the college readiness umbrella was geared toward understanding the college knowledge students gained while at Northern California MCHS. For the purpose of this study, college knowledge refers to information gained pertaining to college admissions, FAFSA, cost to attend college, campus resources, college coursework, campus social climate, career opportunities, college majors, student life, college faculty expectations, and federal aid packages. Only unexpected findings are reported in detail. In general, 50% or more of the respondents agreed more than disagreed that they gained information while at Northern California MCHS regarding college knowledge. Interestingly, however, some responses were unforeseen. A larger percentage of respondents indicated that they neither agreed nor disagreed or that they disagreed more than agreed when it came to gaining knowledge pertaining to student life, college majors, and financial aid packages.

This may be in part due to the fact that Northern MCHS Alumni focused exclusively on the academic preparation for college rather than other factors that also play a role in the enrollment, persistence and degree completion of underrepresented students.

As shown in Table 9, with regard to knowledge gained at Northern California MCHS pertaining to campus social climate, 22.7% disagreed, 31.1% neither agreed nor disagreed, and 46.7% agreed. However, when disaggregated, the percentage of respondents who neither agreed nor disagreed, although lower than the percentage of those who agreed, is not far from surpassing the number of students who agreed in general. The disaggregated breakdown for knowledge regarding campus social climate is as follows: 6.7% strongly disagreed, 15.6% disagreed, 31.1% neither agreed nor disagreed, 35.6% agreed, and 11.1% strongly agreed. With regard to examining knowledge gained at Northern California MCHS about student life, 31.1% disagreed, 28.9% neither agreed nor disagreed, and 40% agreed. Interestingly, when student life is disaggregated by response category, a higher percentage of respondents (28.9%) neither disagreed nor agreed, while 11.1% strongly disagreed, 20% disagreed, 22.2% agreed, and 17.8% strongly agreed. Similar responses are reported for information regarding financial aid packages. With regard to knowledge gained at Northern California MCHS pertaining to financial aid, 17.7% disagreed, 33.3% neither agreed nor disagreed, and 48.9% agreed. When financial aid results are disaggregated by response category, a higher percentage of respondents (33.3%) neither agreed nor disagreed, while 4.4% strongly disagreed, 13.3% disagreed, 31.1% agreed, and 17.8% strongly agreed.

The purpose of this section is to gain a sense of the type of knowledge participants had regarding the organizational function of colleges. Particularly, considering that the Northern California MCHS relative to this study is seen as providing participants with the social and

cultural knowledge pertaining to college, it was useful to highlight key characteristics that were identified as key college knowledge students should know (Conley, 2007). From this segment, it appears that students typically gained knowledge regarding certain college characteristics with the exception of varying responses related to the following: campus social climate, student life, and financial aid packages. The aforementioned characteristics are marked as having varying responses because the majority of respondents for these items marked neutral, disagree, and strongly disagree more than agree or strongly agree.

While statistical significance cannot be calculated due to sample size, the descriptive statistics offer interesting insight to possible knowledge that students did not gain while at Northern California MCHS. Results indicate that there may be contextual factors that limit participants' ability to gain access to the knowledge or, more importantly, participants might not necessarily receive this information while at Northern California MCHS but rather through outside resources.

Table 9

Contextual Skills and Awareness: College Knowledge

Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
College admissions requirements	0% (0)	4.4% (2)	4.4% (2)	46.7% (21)	44.4% (20)	100% (45)
Federal application for student financial aid	0% (0)	17.8% (8)	11.1% (5)	44.4% (20)	26.7% (12)	100% (45)
How much it would cost to attend college	0% (0)	15.6% (7)	13.3% (6)	48.9% (22)	22.2% (10)	100% (45)
Required college admission entrance exams	0% (0)	6.7% (3)	6.7% (3)	44.4% (20)	42.2% (19)	100% (45)

Table (continues)

Table (continued)						
Campus resources (ex. counseling center, career center, tutoring)	0% (0)	13.3% (6)	17.8% (8)	42.2% (19)	26.7% (12)	100% (45)
College coursework	2.2% (1)	0% (0)	11.1% (5)	46.7% (21)	40% (18)	100% (45)
Campus social climate	**6.7%** (3)	**15.6%** (7)	**31.1%** (14)	35.6% (16)	11.1% (5)	100% (45)
Career opportunities	4.4% (2)	13.3% (6)	17.8% (8)	46.7% (21)	17.8% (8)	100% (45)
College majors	2.2% (1)	8.9% (4)	28.9% (13)	37.8% (17)	22.2% (10)	100% (45)
Student life (ex. student clubs and organizations)	**11.1%** (5)	**20%** (9)	**28.9%** (13)	22.2% (10)	17.8% (8)	100% (45)
College faculty expectations of college students	0% (0)	6.7% (3)	22.2% (10)	37.8% (17)	33.3% (15)	100% (45)
Financial aid packages	**4.4%** (2)	**13.3%** (6)	**33.3%** (15)	31.1% (14)	17.8% (8)	100% (45)

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

Social Supports. The final question was posed to gain a sense of the social support participants received while at Northern California MCHS: *How do social support structures and relationships play a role in the college readiness and matriculation process for Northern California MCHS alumni?* Participants addressed statements centered on support of peers, teachers and college faculty, and ways in which respondents offered academic support for one another. High school and community college level support was examined. Table 9 shows that Northern California MCHS alumni typically were supportive of one another most of the time and always (80%). Although respondents indicated that they sometimes, rarely, or never formed

study sessions with their peers (55%) or studied with peers in general (57%), most of the time or always they still received support from peers (84%) and teachers and college faculty (62%) when they needed help on academic assignments.

This section illuminates the importance of social support participants received from high school staff as well as peers. From this section, it is revealed that peer support and high school staff support are both critical components of participants' educational success. To be specific, respondents indicated that they received support from their peers most of the time or almost always when they needed help and that they reciprocated the support when a fellow peer was in need. The same holds true when examining the item referencing teacher support. Participants' responses insinuate that high school staff always made themselves available to students during a time of academic need. These results show that peer support and teacher support are both imperative for the academic success of Northern California MCHS alumni.

Table 10

High School Social Support

Items	Never	Rarely	Sometimes	Most of the Time	Always	Total
My peers and I support one another.	0% (0)	0% (0)	20% (9)	31.1% (14)	48.9% (22)	100% (45)
I frequently form study sessions with my peers.	2.2% (1)	17.8% (8)	35.6% (16)	33.3% (15)	11.1% (5)	100% (45)
I often study with my peers.	2.2% (1)	20% (9)	35.6% (16)	31.1% (14)	11.1% (5)	100% (45)
I received support from my peers when I needed help on class assignments.	4.4% (2)	8.9% (4)	17.8% (8)	46.7% (21)	37.8% (17)	100% (45)
I feel comfortable talking to my teachers/college professors.	0% (0)	4.4% (2)	11.1% (5)	46.7% (21)	37.8% (17)	100% (45)

Table (continues)

Table (continued)

I received academic support from teachers/college professors if have trouble with assignments.	2.2% (1)	15.6% (7)	20% (9)	46.7% (21)	15.6% (7)	100% (45)

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

At the community college level, results from table 10 show that Northern California MCHS respondents might not have received as much social support from community college peers as they did from high school peers. Although respondents indicated that they supported one another most of the time or always, the percentage is lower than the support received from high school peers (55%). Additionally, results reveal that the majority of respondents indicated that they sometimes, rarely, or never formed study sessions with community college peers (71%), studied with community peers (69%), or received academic support on class assignments if they needed help (51%).

When comparing the social support received from high school peers relative to the support received from college peers, results show that participants typically received more from their high school classmates. Thus the major takeaway from this segment is that participants might not have interacted much with college peers, although students shared the same classroom environment and college campus.

Table 11

Social Support: Community College Peers and Staff

Items	Never	Rarely	Sometimes	Most of the Time	Always	Total
My peers and I support one another.	0% (0)	11.1% (5)	33.3% (15)	31.1% (14)	24.4% (11)	100% (45)
I frequently form study sessions with my peers.	2.2% (1)	31.1% (14)	37.8% (17)	15.6% (7)	13.3% (6)	100% (45)

Table (continues)

Table (continued)

I often study with my peers.	0% (0)	26.7% (12)	42.2% (19)	22.2% (10)	8.9% (4)	100% (45)
I received support from my peers when I needed help on class assignments.	2.2% (1)	8.9% (4)	40% (18)	33.3% (15)	15.6% (7)	100% (45)
I feel comfortable talking to my teachers/college professors.	2.2% (1)	13.3% (6)	24.4% (11)	33.3% (15)	26.7% (12)	100% (45)
I received academic support from teachers/college professors if have trouble with assignments.	2.2% (1)	15.6% (7)	20% (9)	46.7% (21)	15.6% (7)	100% (45)

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

Open-Ended Survey Responses

For this study, one open-ended survey response was included in the survey as a means to collect information from respondents regarding suggestions for survey improvement. Respondents were asked the following question: *Do you have any comments or suggestions to improve the survey?* Along with worthwhile suggestions that were given, Northern California MCHS alumni utilized this space to elaborate on their college readiness experience and their transition from high school to college. For this reason, data from the open-ended portion of the survey are included in the quantitative results.

In an effort to remain consistent throughout the study, open-ended survey responses were coded based on the theoretical framework grounded in this dissertation study, David Conley's (2007) comprehensive framework, and social capital, as well as social network theory. The following codes were used to analyze textual data: *key content areas, academic behaviors and cognitive skills, college knowledge as well as social supports*. The aforementioned items also served as the same topic categories included in the survey. Responses "N/A" and "none" were excluded from the coding analysis. Of the 45 respondents who participated in the survey, 18

provided responses to the open-ended question. Of those 18 responses, 6 statements fit the designated codes while the remaining 12 were about survey improvement (see table 11) for codes related to college readiness). Of the six statements, four referenced contextual skills and college knowledge, one referenced academic behavior and cognitive skills, and one referenced social supports.

Table 12

Open-Ended Codes and Quotes

Code	Frequency Count	Quote
Key Content	0	N/A
Academic Behaviors and Cognitive Skills	1	"MCHS played a big part in preparing me for my undergraduate degree as well as graduate degree. I think the time management skills we learned and how to balance college course load was key preparing me to handle work at the undergraduate and graduate level"
College Knowledge	4	"Diversity of Middle College vs. Diversity of the Institution" "Would have loved more insight at Middle College on majors and job opportunities after college" "One thing that I noticed is that Middle College doesn't inform students about other degrees students can obtain upon graduating other than an AA degree. Had I known ahead of time, I would've strived for an AS." "overall , I think this was a great survey. As far as my college preparation, I feel like MCHS gave me an idea of what college would be like and gave a head start on the perquisites I needed to graduate with a Bachelors degree. But on the other hand, a community college is a lot different from a university. The coursework is not comparable and the social interactions are very different therefore, I had some unrealistic expectations based on my experience at California Community College. With all that said, I do appreciate MCHS giving me a head start on my college education and would not have done things differently, but I think if there is a someway to address the realistic differences that may arise when transferring from a community college to a university in the MCHS curriculum would be extremely helpful."
Social Supports	1	"I think that it would help if you could have the participants describe their relationship with facility and administrators. As well as include their social experience in Middle College"

Source: Middle College High School Alumni Survey, 2012; Author's calculations.

Worth noting are the statements regarding college knowledge. Four participants indicated that they did not gain sufficient information related to college knowledge, whether it was about

college majors, career opportunities, or the campus social climate. Regarding college major choices and career opportunities, a handful of Northern California MCHS alumni articulated that they wish they would have received more information regarding the different types of majors they could have pursued and that had they known earlier on in their academic preparation they would have strived to engage in opportunities and majors that were career specific.

Northern California MCHS alumnus Jake said, "one thing that I noticed is that Middle College doesn't inform students about other degrees students can obtain upon graduating other than an AA degree. Had I known ahead of time, I would've strived for an AS." Similarly, Northern California MCHS alumna Melissa asserted that she "would have loved more insight at Middle College on majors and job opportunities after college." Essentially, both alumni articulated the need to know more about major and career opportunities while at Northern California MCHS, thus suggesting this information may have been lacking or not thoroughly addressed in the Northern California MCHS curriculum or academic as well as social support outreach efforts.

Last but not least, the open-ended statement regarding campus social climate is noteworthy. To be specific, Jessica's statement hints that although students may be academically ready for college, preparation for the actual transition to a 4-year institution may be minimal at best or not addressed at Northern California MCHS. She stated:

> "As far as my college preparation, I feel like MCHS gave me an idea of what college would be like and gave a head start on the perquisites I needed to graduate with a Bachelors degree. But on the other hand, a community college is a lot different from a university. The coursework is not comparable and the social interactions are very different therefore, I had some unrealistic expectations based on my experience at California Community College. With all that said, I do appreciate MCHS giving me a head start on my college education and would not have done things differently, but I think if there is a someway to address the realistic differences that may arise when transferring from a community college to a university in the MCHS curriculum would be extremely helpful."

Overview of Quantitative Findings
The Need for Further Investigation Through a Qualitative Lens

Review of the quantitative results reveals that Northern California MCHS alumni included in this study gained an extensive amount of college credits upon graduating from Northern California MCHS. In addition, participants stated that they felt academically prepared for college and developed the necessary academic behaviors. Unexpectedly, however, it appears respondents may have lacked information pertaining to college knowledge, specifically relating to campus climate, student life, and financial aid. This is unexpected considering research reveals MCHS-ECHS is structured to provide "a smooth transition from the students' familiar high school environment to the unfamiliar college campus" (Wechsler, 2001 p. 157), which includes academic as well as psychological transition from high school to college and access to knowledge regarding the organizational processes and contextual college climate (Conley, 2007). Granted, it is understood that Conley's (2007) comprehensive framework is not a one-size-fits-all model, but the findings address a larger inquiry regarding the underlying meaning of college readiness.

Considering there are some aspects of David Conley's (2007) comprehensive college readiness framework that are not fulfilled (e.g., information regarding campus climate), what does that mean for the notion of being college ready? Review of the literature highlights various attributes, skill sets, and processes an individual needs in order to be considered college ready (Conley, 2007). However, what happens if an individual is missing one or more college readiness attributes but still manages to enroll and graduate from college? This is the case for Northern California MCHS alumni included in this work. It is imperative to address what it means to be college ready, and more specifically from the perspective of Northern California

MCHS alumni, to illuminate the meaning of college readiness for an individual or group who have identified themselves as not gaining a particular college readiness attribute but still manage to transition into higher education. In addition, tapping into participants' support structures will bring to the forefront support resources that made up for the college knowledge not received while at Northern California MCHS.

The aforementioned findings prompted and shaped the development of the qualitative portion of this study, which is distinctively centered on addressing these overarching questions:

1. *What does it mean to be college ready for Northern California MCHS alumni?*

2. *Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?*

An interpretative phenomenological data analysis was employed and is addressed in the following chapter.

Chapter 5

Qualitative Phase

The following chapter outlines the qualitative phase for this sequential explanatory mixed method design. First, I introduce interpretive phenomenological inquiry and explain why it is the best technique for this work. Thereafter, I present the data collection and data analysis procedures. Finally, the results are presented and discussed.

Phenomenology

The concept of phenomenology (the study of a phenomenon) has been around for some time, but it is the work and progressive ideals of Edmund Husserl (1859-1938) that caused the philosophical paradigm to gain recognition over the years (Groenewald, 2004; Moran & Mooney, 2002). Husserl focused on examining the intentionality of consciousness because he believed that scientific methods are not sufficient techniques to examine how individuals experience the lived world (Griffith, 2009). Husserl was sure that "people can be certain about how things appear in, or present themselves to, their consciousness" (Groenewald, 2004, p. 4), and it is through the absolute certainty of human perception, rather than "casual variables" (Griffith, 2009, p. 36) that researchers can gain a holistic and in-depth understanding of reality, and more importantly a phenomenon of interest.

As a result of his philosophical endeavors, Husserl developed a phenomenological inquiry, which is commonly used to discover "essences of experiences" (Moustakas, 1994, p. 46). It is undergirded by "sound perceptions, ideas and judgments" (Moustakas, 1994, p. 46) and is methodologically rigorous. To date, Husserl's epistemological framework is viewed as "a bold, radically new way of doing philosophy" (Moran, 2000, p. xiii), because it values human perception as reliable data that can be used to explore (via textual description) the real meaning

of a particular phenomenon as it is lived and experienced by a person or several individuals (Creswell, 1998; Marques & McCall, 2005; Moustakas, 1994; Penner & McClement, 2008; Starks & Trinidad, 2007).

In addition, a key aspect of Husserl's phenomenological approach is epoche, "a Greek word meaning to stay away from or abstain" (Moustakas, 1994, p. 85), which is also referred to as bracketing. Bracketing is viewed as a critical methodological technique that establishes validity and reliability (Ahern, 1999) by calling "researchers to put aside their repertoires of knowledge, beliefs, values and experiences in order to accurately describe participants' life experiences" (Chan, Fung, & Chien, 2013, p. 2). The idea is that researchers must examine a phenomenon as it is first presented through data, and for this reason researchers must approach with a fresh pair of eyes. Interestingly, however, while bracketing is viewed as a way to establish rigor in qualitative research and more specifically Husserl's phenomenology, the idea has prompted much debate resulting in variation in phenomenological approaches and methodological techniques (Chan et al., 2013). To this end, scholars seeking to design and implement a phenomenological study must be aware of the type of phenomenological techniques that are available. I emphasize and utilize Interpretative Phenomenological Analysis, described in the subsequent section, to examine Northern California MCHS alumni perception of their college readiness and transition to college, and address the following research questions:

1.) What does it mean to be college ready for Northern California MCHS alumni?
2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?

Interpretative Phenomenological Analysis

Interpretative Phenomenological Analysis (IPA), founded by Martin Heidegger (1889-1976), Edmund Husserl's former student, is undergirded by phenomenology (described above) and hermeneutics (the philosophy of interpretation). Unlike phenomenology, which purely focuses on describing experiences based on how people perceive the world, hermeneutics takes a further step by seeking "the meaning[s] that are embedded in everyday experiences" (Reiners, 2012, p. 1). A hermeneutic paradigm particularly places emphasis on "language as interpretative and not just descriptive" (Moodley, 2009, p. 39). Thus when researchers employ an interpretative phenomenological analysis, they are looking for not only a description of the phenomenon but also the meaning behind it and what it means to the individual whom experienced it. In this way, IPA is concerned with examining an "individual's lived experience and explores the personal perceptions and meanings attributed to an object or an experience" (Moodley, 2009, p. 39). In particular, according to Smith (2007), IPA is a double hermeneutic process in that participants in IPA are trying to gain a clearer understanding of their social world and experience, while the researcher is trying to "make sense of the participants, trying to make sense of their world" (p. 53).

Additionally, another distinguishable feature of IPA, aside from the fact that it is an interpretative technique rather than descriptive, is its position regarding bracketing. As mentioned earlier, the birth of phenomenology by Edmund Husserl sparked much debate and resulted in variation of phenomenological inquiries informed by different schools of thought. The development of IPA in particular (driven by hermeneutics as mentioned above) was undergirded by Heidegger's disagreement with the idea of researchers refraining from judgment in phenomenological research. Mainly, Heidegger argued that a researcher could not merely set

aside what they know regarding a phenomenon or lived experience, essentially arguing that our understanding of human perception of the world is more than description and incorporates our understanding and theoretical awareness regarding the world we live in (Reiners, 2012).

As articulated by Reiners (2012), "Heidegger, who was interested in interpreting and describing human experience, believed that bracketing was not warranted because hermeneutics presumed prior understanding" (p. 2). For that reason, according to Koch (1995), researchers' presuppositions or knowledge attained regarding a phenomenon of interest can never be eliminated. Rather, researchers' pre-established knowledge about a phenomenon is viewed as information that provides insight to an event being studied. To this end, IPA is more concerned with researchers taking a reflexive approach where their experience or knowledge about a phenomenon is brought to the forefront, rather than being bracketed, which is the case in traditional phenomenological research (Reiners, 2012).

Why Interpretative Phenomenology?

From a philosophical standpoint, IPA was chosen as the qualitative method for the second phase of this sequential explanatory mixed method design because it enabled me to focus on a particular phenomenon of interest that is unique and shared among all Northern California MCHS alumni included in this study: their college readiness experience and their transition from Northern California MCHS to a 4-year institution. Through an IPA theoretical lens and method, I was able to examine each participant's perception of their college readiness and college transition experience, and how they made meaning of their experience, rather than simply focus on describing it. In addition, and most important, IPA is undergirded by a reflexive technique that essentially allows me to highlight how my experience as a Northern California MCHS alumna played a role in the development and recruitment of the participants included in the

second phase of this study. I was able to describe and interpret Northern California MCHS alumni experiences through a theoretical lens that informed the development of this study: David Conley's (2007) comprehensive college readiness framework and social capital theory. Through my prior theoretical knowledge regarding college readiness and social capital, I was able to collect and present data that provide readers the chance to examine how Northern California MCHS alumni perceive their college readiness and transition to college in order to pinpoint what resources along the high school to college pipeline were key to their enrollment, persistence, and degree completion after high school. As a result, an understanding of what it means to be college ready in addition to the role networks and support structures play in the college preparation process is illuminated.

Data Collection

Data was collected via semi-structured in-depth interviews from a purposeful sample of Northern California MCHS alumni who participated in the quantitative phase of the sequential explanatory mixed method design in January 2012 and agreed to partake in follow-up data collection. Voluntary consent was established in the first phase of the study, therefore there was no need for respondents to go through the voluntary consent process for the second phase of the dissertation. Participants were contacted by email in June 2013. Of the 30 that agreed to take part in follow-up data collection, 11 reaffirmed their decision to participate. Participants that decided to partake in the semi-structured interviews were interested in providing insight into their educational experience at Northern California MCHS. The remaining 19 did not respond to the follow-up email invitation or stated they did not have time in their schedule to interview due to work, internships, family, or school obligations.

At the onset of the interview, participants were reassured that they could withdraw from the study at any time and also that they had the right to withdraw statements they provided during the interview at any time. Interviews were conducted over the phone and lasted until participants were done providing an in-depth account of their transition from high school to college. If further verification was needed, participants were contacted for brief follow-up interviews. Interview data were stored and locked in a secure filing cabinet that only I had access to. In addition, interview audio files were stored on a password-secured computer and secure University of Illinois–Urbana-Champaign (UIUC) server that only I had access to. Transcription files and interview audio files will be stored for a minimum of 3 years in accordance with the UIUC Institutional Review Board (IRB) compliance guidelines. The IRB is valid until February 1, 2015.

Sampling

The sample consisted of 11 respondents (4 males and 7 females), with the following cohorts represented: 2004 (1 respondent), 2006 (1 respondent), 2007 (2 respondents), 2008 (4 respondents), 2009 (2 respondents), and 2010 (1 respondent). The racial/ethnic categories represented are as follows: 3 African-American, 3 Asian, 1 Caucasian, 3 Hispanic, and 1 Multi-Racial. Five respondents were the first in their family to attend college, while the remaining six were not. All 11 Northern California MCHS alumni graduated with their high school diploma and associate of arts degree simultaneously and transferred into a 4-year public institution immediately following high school graduation. Nine participants attended a California public 4-year institution, while two attended college out-of-state (one attended a public institution and the other attended a private institution).

With regard to college credits, on average the participants accumulated more than 30 college credits that were transferrable to their postsecondary institution. The following academic major fields within the social sciences and science are represented: sociology, criminal justice, business economics, neuroscience, economics, psychology, international relations, religious studies, social work, sports management, social welfare, ethnic studies, and marketing. Five participants indicated that they have siblings that also went to or are currently enrolled at Northern California MCHS, while the remaining six indicated they did not have siblings that attended Northern MCHS; their siblings instead went to a traditional public high school in the neighboring district.

Regarding mother/female guardian educational attainment, 8 of the 11 respondents' mother/female guardians have a high school diploma or higher. Three indicated N/A. For father/male guardian educational attainment, 7 of the 11 respondents have a father/male guardian with a high school diploma or higher. Four reported N/A.

Table 13

Interview Participant Demographic Profile

Participant	Gender	Race/Ethnicity	MCHS Cohort	Undergraduate Institution Type	Major	First-Generation College Student
Sponge Bob	Male	African American	2006	Public West	Sociology and Criminal Justice	No
Patrick	Male	Asian	2007	Public West Research One	Business Economics	Yes
Mike	Male	Asian	2009	Public West Research One	Neuroscience	No
Jake	Male	Asian	2009	Private West Research One	Economics	No
Laura	Female	Hispanic	2004	Public West Urban	Psychology	Yes
Ashley	Female	Caucasian	2008	Public West Urban	International Relations and Religious Studies	No
Amber	Female	African American	2007	Public	Sociology	Yes
Diane	Female	Hispanic	2008	Public	Social Work	No
Bianca	Female	African American	2008	Public	Sports Management	No
Lily	Female	Multi-Racial	2010	Public	Social Welfare and Ethnic Studies	Yes
Bailey	Female	Hispanic	2008	Public	Marketing	Yes

Source: Author: Middle College High School Alumni Survey

Interview Protocol

The interview protocol is comprised of 30 open-ended questions that cover the following five categories:

1.) Student experience

2.) Supports

3.) College readiness

4.) Transitioning to college

5.) Final thoughts

David Conley's (2007) comprehensive college readiness framework (grounded in the following tenets: key content area, academic behaviors and cognitive strategies, contextual skills and awareness) guided the questions centered on college readiness while social capital theory literature guided the questions centered on student support. Questions pertaining to student experience and transitioning to college were driven by findings presented in chapter 4. Taking into consideration the focus of the qualitative phase is to further understand Northern California MCHS alumni perception of their college readiness, transition to college, and support structure, specific attention is given to responses that describe Northern California MCHS alumni college perception of their preparation in the following areas: key content area, academic behaviors and cognitive strategies, contextual skills and awareness, and college matriculation. Responses regarding social supports were examined as well.

Qualitative Reliability and Validity

Reliability. Within qualitative studies the researcher seeks to establish reliability by ensuring the qualitative procedures are employed in such a way that can be replicated across various qualitative studies (Creswell, 2009). For this reason, qualitative researchers extensively

document the way in which qualitative data are collected, analyzed, and reported (Yin, 2003). Considering the sequential explanatory mixed method design is new, I ensured that I provided detailed explanation outlining each methodological procedure. Due to the uniqueness of the qualitative phase of this mixed method design being derived from the quantitative phase, I distinctively outlined the way in which the collection and analysis are mixed and how the quantitative phase informs the development of the qualitative phase immediately following the completion of quantitative data analysis. The procedural qualitative steps are also outlined in the visual model presented in chapter 3 of this work. The visual model specifically highlights the entirety of the qualitative design, the methodological approach, data collection, and analysis for this study.

Validity. With regard to validity in qualitative research, researchers much ensure the findings are presented and reported with accuracy (Creswell, 2009). By establishing validity, Creswell (2009) contends that researchers establish credibility, trustworthiness, and authenticity. To establish validity in this study, the following procedures are employed: self-reflexivity and member checking. Both are subsequently presented and discussed.

Self-Reflexivity. For this work, self-reflexivity is established to show how my personal background and experience shaped the development of this work. In his work "The Coming Crisis of Western Sociology," Alvin Gouldner (1970) called for researchers to reflect upon their own experiences and how those experiences shape their work, often known as reflexive sociology. Essentially, reflexive sociology "recognizes the influence of the researcher's values and assumptions on the process of inquiry" (Cunliffe, 2003, p. 995). My position as a Northern California MCHS alumnus significantly shaped the development of this study and data collection

for both the quantitative and qualitative strands. The self-reflexive response is presented in the data analysis section.

Memo writing during the data collection process served as a mechanism to ensure my preconceptions were continuously brought to the forefront and set aside (but not disposed of) to allow for a better data collection and data analysis process as often as possible (Cunliffe, 2003). After every interview, I recorded my thoughts and any notes in the data memo template. I refer to this process as a check-and-balance process throughout the development and data collection and data analysis process. The memo procedure also serves as a "function of establishing an audit trail, whereby the analyst documents her thoughts and reactions as a way of keeping track of emerging impressions of what the data mean, how they relate to each other, and how engaging with the data shapes her understanding of the initial hypotheses" (Starks & Trinidad, 2007, p. 1376). In this study, memos were particularly useful in helping me keep track of presuppositions and later were incorporated back into the final discussion and conclusion chapter of the dissertation study, where I revisit the larger purpose of the study, which is to holistically view Northern California MCHS alumni perception of their college readiness and transition to college.

Member Checking. Last but not least, I relied on member checking to validate participant response data for accuracy and clarity (Doyle, 2007; Merriam, 1998). Member checking is the process in which participants are given the chance to re-read their transcription once it is transcribed. During this process, participants have the final say on what information they would like to include or not include. If participants opt to omit information, it would be deleted. None of the participants opted to have any portion of their interview deleted. It is important to note that not all participants who interviewed engaged in the member checking process. When the 11 participants were contacted to validate their response, only a handful responded. For individuals

who did not respond, their interview data was given much attention during the data triangulation process to ensure findings matched across both quantitative and qualitative strands.

Data Analysis

This section outlines the steps that were taken to analyze the transcript data collected from the sub-sample of Northern California MCHS alumni. The audio files were transcribed verbatim by a professional transcription service. The transcriber was required to sign a confidentiality agreement that was subsequently stowed away in a secure location. After the completion of each transcription, transcription files were reviewed for accuracy against the audio files, and changes were made to the transcription file if needed. I made use of Interpretative Phenomenological Data Analysis developed by (Smith, 2007), which emphasizes the following steps:

1. Looking for themes in the first case
2. Looking for connections
3. Continuing the analysis with other cases
4. Writing up

Hyper-Research, qualitative research software, was used to code and analyze interview transcripts (Creswell, 2009; Hesse-Biber, Dupuis, & Kinder, 1991).

Self-Reflexive Essay

I was only 14 when I entered high school. There was nothing ordinary about my experience. Middle College High School collaborates with the Contra Costa Community College, offering students rigorous curriculum and an intense college experience. I took classes alongside college students on a college campus and actively engaged in meaningful conversation with college professors. I was viewed as a college student and was held to high academic and

behavioral expectations. This opportunity allowed me to earn my high school diploma as well as my associate of arts degree in liberal studies at the age of 18. When looking at my graduating class of 60 seniors, I began to wonder why all the other students within my school district were not graduating with me. I then realized this was the case because my high school was the only college preparatory school that informed its students about the A-G requirements needed to gain acceptance into the top universities, and kept their student population to a minimum. I figured if all students had a similar curriculum, academic resources, and academic counseling like me, they too would be able to have the opportunity to attend a university of their choice. This experience incited my research interest of issues related to access to higher education.

I pursued my research at UC Irvine. However, the dramatic change in environment and racial demographics at UC Irvine took a toll on me academically and emotionally. My first year as a transfer student was one I would never forget. UC Irvine is a large campus, not the same as the community college I attended prior. Classes were larger with the maximum capacity of students being 300, depending on the classroom. My typical class at my community college was no bigger than 20. The stark difference in classroom environment made me feel as if I was a face among many. Luckily, I knew the importance of interacting with professors earlier in my academic journey and made sure my face was a familiar one by going to office hours regularly, asking questions in class, and sitting in the front row in classes. My active engagement to stand out amongst my peers led to strong letters of recommendation to enter the Political Science Honors Program for my respective major.

While I finally found a bit of academic success after failure, it dawned on me that being a first-generation, African American, low-income female transitioning into a predominantly white and Asian research institution was all but easy. I was isolated, alone, forgotten, and often

questioned my existence in my environment. In 2006, the percentage of African American student enrollment at the University of California–Irvine was less than 2%. Since graduating in 2009, that percentage has only increased to 3%. In regards to African American women faculty, the numbers are the same. Buried deep in the University of California data system, you will find that at UC Irvine in 2009, out of 1,059 faculty members, only 23 were African American, representing 2.1%. When breaking the numbers down, only 10 are African American women, representing 0.9%. The odds of ever seeing another student or faculty member that looked like me were slim to none.

The lack of diversity dramatically impacted my experience at UC Irvine. Too often I encountered racial profiling. I had to walk a thin line in my predominantly White and Asian classrooms because I was the *token* spokesperson for my race, which often left me marginalized more often than not. I faced being told I was not "black enough" by my White peers because I did not fit into their stereotypical image of an African American woman. In addition, after my second quarter, I would soon learn my personal background was a burden, a part of me that I was ashamed to mention. When I mentioned I was from Richmond, CA, I was classified as ghetto, rowdy, hood, and not scared of anything. The most praise Richmond, CA, ever received, that many remember, is being one of the most dangerous cities to live in 2007, and the Hollywood film *Coach Carter*. My personal background was my skeleton in my closet. After this traumatizing experience, I began to refer to my place of birth as the San Francisco Bay Area.

I managed to deal with frequent micro-aggressions and survive UC Irvine when a Residence Hall Advisor, Dorothy Pirtle, the first African American woman I met after being on campus for two years, and now my close friend, introduced me to an undergraduate advisor who took me under his wing. I was soon introduced to a Summer Academic Enrichment Program,

geared toward enhancing the academic research experience of first-generation college students. Thereafter I sought out a Professor in Education to help me with my research on Middle College High School, specifically looking at the program characteristics and how this program may help students go to college.

More importantly, based on my transition experience, I wanted to figure out a way to develop mechanisms for students like myself to have a smooth transition from high school to college. However, after frequent conversations with my research advisor, I learned that information regarding MCHS alumni was limited. I remember my research advisor asking, "Where did your peers go to college? Did they graduate from a four-year institution?" It was at this point I realized, the question did not yield an answer.

I participated in the Summer Research Opportunity Program at the University of Illinois–Urbana-Champaign, where I continued my study on Middle College High School in order to contribute to the body of knowledge an in-depth perspective on MCHS and student educational outcomes under the guidance of Dr. William Trent. By this time I had gained additional research skills that allowed me to narrow my research questions. Dr. William Trent assisted me in creating my first survey, and the very first Middle College High School Alumni Survey. In essence, my educational experience, interest in the experiences of Middle College High School students, and multiple conversations with my advisor played a critical role in the formation and development of this study.

Particularly, I attended the same Northern California MCHS as the participants included in this sample. For this reason, my status as a Northern California MCHS alumna gave me the network I needed to recruit students to partake in the current sequential explanatory mixed method study. I participated in research opportunity programs that provided me the space to

develop a role as a researcher utilizing the theoretical and methodological tools I've gained over the years to examine other Northern California MCHS alumni perception of their college readiness and college matriculation process. In essence, I am excited about the work I am currently pursuing and look forward to readers gaining a holistic understanding of the college preparation and college enrollment experiences for a group of students traditionally underrepresented in higher education after reading this sequential explanatory mixed method design examining Northern California MCHS alumni student perception of their college readiness and transition to college.

Presentation and Discussion of Qualitative Findings

The development of the qualitative phase was driven by the need to augment findings in the quantitative segment of this work and address the following research questions:

1.) What does it mean to be college ready for Northern California MCHS alumni?

2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?

To answer the aforementioned questions, a phenomenological inquiry was implemented, and the following phenomena were examined:

1.) Northern California MCHS alumni college readiness processes

2.) Northern California MCHS alumni support structures received while attending Northern MCHS

Data were collected via semi-structured interviews from a sub-sample of 11 Northern California MCHS alumni who participated in the quantitative phase of this study. Data were analyzed utilizing an interpretative phenomenological data analysis, which involved reading interview transcript data in order to document and interpret priori themes (pre-established themes) to better understand the essence of the phenomena being studied. In the subsequent section, themes and representative statements that support the phenomena being studied are presented.

Overview of Qualitative Themes: The Experience of Northern California MCHS Alumni College Readiness Process and Social Supports

Data reveal that Northern California MCHS was generally perceived as a college preparatory program that played a role in the participants' enrollment, persistence, and degree completion at their respective 4-year institution. After interview transcriptions went through the

interpretative phenomenological data analysis process, priori themes supported by significant statements exposed Northern California MCHS alumni college preparation process and the roles systems of social support play in their transition along the educational pipeline. The college readiness themes addressed were driven by David Conley's (2007) comprehensive college readiness tenets:

1. Key cognitive strategies
2. Academic knowledge and skills
3. Academic behaviors
4. Contextual skills and awareness

The social capital theoretical framework guided the social support theme. All five themes are subsequently presented and backed up by representative supporting statements from participants interview transcripts.

College Readiness

Theme One: Academic Knowledge and Skills

Among all participants, it was generally perceived that Northern California MCHS was a program that offered a rigorous academic curriculum, which played a role in their academic preparation for college. For David Conley (2007), academic preparation is the underlying tenet that describes an individual's academic knowledge and skill sets. This includes preparation in key content subject areas, writing, and research. It should be noted that none of the participants engaged in in-depth writing or research, thus specific attention is given to their academic preparation in key content areas.

Academic Preparation. Most participants stated that they felt academically prepared for their college major as a result of taking a course in their respective field while at Northern

California MCHS. For participants who knew what major they were entering, transitioning into their department majors at 4-year institutions was a relatively easy process. For example, when asked if she felt academically prepared for her major, Amber stated, “Yea, actually that’s because a lot of the prerequisites from my major I completed in Middle College for my actual major [sociology].” To be specific, Amber stated, “ I already had half the credits already.” Patrick’s and SpongeBob’s academic preparation echoes Amber’s in the sense that they too felt academically prepared for their college major as a result of taking major-specific courses while in high school. In Patrick’s case, he knew he wanted to pursue a degree in business economics, so he worked to earn his associate of arts degree in business. Patrick mentioned, “I wanted to graduate with an Associate’s degree in Business Admin, for years I guess. So that’s what drove me to take all these classes.” In SpongeBob’s case, taking college courses in criminal justice gave him an academic advantage when he transitioned into college. When asked if he felt academically prepared for college he stated, “Very prepared. I took a lot of the classes for my major at the community college level, and it just was almost second nature. A lot of the stuff I already knew.”

Interestingly, a few students who did not have a declared academic discipline of interest indicated that they were not academically prepared for their college major. A handful of participants were still figuring out what major field they wanted to pursue upon transitioning into college, and even though they were able to utilize their transferrable college credits to enroll as an upper classman, the credits earned did not transfer to the major of interest they declared after transitioning into college. An example of having a substantial amount of college credits but not being academically prepared for a major is highlighted in Ashley’s and Bianca’s experiences. When asked if she felt academically prepared for her major, Ashley stated,

> "I double majored, and neither of my majors did I take classes in while I was at Middle College. Especially, one of my majors is International Relations and the other is Religious Studies. I feel like the work we did, I got used to the type of reading we did in those majors, and the work load, the exact stuff of the major, not so much."

Bianca indicated that she learned more about her major after declaring and entering the field. Bianca mentioned, "I was very well prepared to continue with my college education after high school. My education was quality and I had taken so many college courses in high school that I was able to enter college as a sophomore." However, with regard to her academic major she stated, "I wasn't academically prepared for my major. Any knowledge that I had pertaining to my major was self-taught going into college."

Theme Two: Academic Behaviors

Each of the 11 participants attributed their success in college to one or more academic behaviors they gained while in high school that were transferrable to their respective 4-year institution. For the purpose of this work, academic behaviors that were commonly identified include time management, study habits, and the ability to handle college coursework. Results demonstrate that high school staff spent designated class time addressing one of the aforementioned skill sets during Early College Seminars to ensure students became equipped with the knowledge needed to handle high school coursework and college-level coursework simultaneously.

Time Management and Study Habits. Bianca's comments illuminate how a course factored into Northern California MCHS alumni schedule helped students learn time management and study habits. As Bianca illustrated, "middle college impacted my time management skills by providing a class solely focused on time management skills." Particularly, as articulated by Bianca, "There was a semester that all students were required to take a time management class. This was [Northern California MCHS's] attempt to provide support to help

manage our time while taking both high school and college classes." The aforementioned sentiment is similarly echoed by Laura, who stated, "It also helped me prioritize my assignments since the professor's schedule on their own time, not according to my schedule and when other assignments are due." The same process of learning time management skills was similar to the structure of learning study habits.

An example of how learning time management skills was similar if not the same as the structure of learning study habits is presented in Bianca's comment. Particularly, interview data show a course on study skills was also a requirement. For example, Bianca went on to say, "Northern MCHS impacted my study habits by requiring classes that allowed time to study and get any help needed."

The time management and study habit skills participants gained were viewed as beneficial skill sets throughout respondents' educational journeys at their respective 4-year institutions. SpongeBob's and Laura's experiences are utilized as examples to bring to the forefront identified benefits of learning time management and study habit skills earlier on in one's educational program. SpongeBob stated,

> "the school [Northern MCHS] taught me a lot about both study habits and time management. I basically- that's what college is all about. 'Cause I worked full-time in college. I didn't have a- I mean, I had a scholarship, but it wasn't enough to cover everything 'cause I lived on my own throughout college. And I was taking seventeen, eighteen units, so I didn't have a lot of time. So those skills that I learned at Middle College about note-taking, time management, doing stuff. It was very, very, very helpful."

This sentiment was also discussed during Laura's interview. Laura stated, "I used some of the techniques I was taught at Northern MCHS at Public West State University. I believe without those study habits I would have been a bit more flustered and not concentrated." Even if respondents may not have needed training to manage high school and college coursework, it was

generally acknowledged that Northern California MCHS did provide respondents the necessary training that would equip them with tools to enable them to manage college demands and academic workloads. During an interview, Patrick mentioned not needing to study because he was capable of learning course material while in class. However, he did acknowledge that there was a seminar solely dedicated to teaching students time management in study habits. "I think study habit is based on people's own personality and how they were raised. I don't feel like it has anything to do with a school setting unless there's like mandatory studying in which is like EC seminar I guess. That was a time to study. But then I didn't really need it to study extra I guess so I didn't really study in EC seminar as well."

Theme Three: Key Cognitive Factors

David Conley (2007) contended that cognitive strategies are "intentional and practiced behaviors that become a habitual way of working toward more thoughtful and intelligent action" (p. 13). In order to grasp the cognitive strategy process, respondents were asked to describe their critical thinking abilities and ways in which Northern California MCHS might or might not have helped them develop this skill.

Critical thinking. Results reveal that participants' critical thinking skills were developed as a result of numerous educational experiences they encountered at Northern California MCHS. For example, several participants articulated that critical thinking was taught at an "early age" and was developed as a result of being exposed to different topics and disciplines in college courses, earlier along their educational journey. For example, Bianca stated that Northern California MCHS affected her ability to think critically by "challenging her to [think] and work harder at a younger age." Similarly, Bailey mentioned, "critical thinking skills where exercised at an earlier age." She, too, expressed that it was because students took college classes while in

high school, early on in their academic program, and during those classes students often "experienced an intellectual push from MCHS faculty." For Diane, her critical thinking skills were developed because Northern California MCHS made her "grow up fast and prioritize what was more important vs. what wasn't important." Essentially, Diane had to analyze what aspects of her life were more important in order to continue her path toward higher education.

Others attributed the development of their critical thinking skills to faculty expectations that ultimately pushed students to think deeper about college course assignments. This was addressed during Ashley's interview: "Taking that class [referring to a college course] and just the teachers to push to think critically, and not just think oh what's the right answer. I feel definitely prepared." Similarly, Laura stated, "Some classes began to plant the seeds for critical thinking. The ability to be part of different college classes (mostly our history classes) that made us look at the reasons behind significant historical events." The sentiments were expressed in Ashley's detailed experience of the same history class Laura mentioned. Being exposed to college students that were older and shared key historical events and the ways in which the historical events impacted their lives was an eye opener for Northern California MCHS students. Ashley stated, "I personally really enjoyed it [referring to taking college courses with college students]. You got to know a lot of people. I find that you learn a lot more when there's an age mix, rather than just being everyone the same age with the same experiences. It was really interesting taking, like the history class I had to take my junior year in a college setting, where you were talking with some people who had been alive in the 60s and 70s, when we were talking about the 60s and 70s, and it really interesting perspective in a class that you don't usually get from the students."

In addition, being in a college setting challenged respondents to critically think about their positionality as a high school and college student. The consistent dual experience as a high school and college student created thought-out behavioral patterns that differed depending on the context participants navigated. For example, Bailey touched upon this during her interview when she describes her process of critically assessing her environment and changing her level of maturity depending on the context:

> "I think my maturity level depended on what situation and environment I was in. In college classes and walking in between classes I think I was mature. I know for a fact my maturity level dropped when I was in high school classes and hanging out with high school friends."

Laura's experience, although different from Bailey's, showed how her environment, specifically accepting her admission at Northern California MCHS, was the beginning of her analyzing the importance of her academic journey and, more importantly, what steps she decided to take in order to ensure she continued on the path to higher education. Laura said,

> "By going to Northern MCHS I was going to separate myself from many of my friends. That decision was the first of many decisions that were made to keep me on my path to higher education. I feel like all of us showed some level of maturity by just participating in the program. I think it was also higher than most of my peers because I was able to make smart decisions (going to class, avoiding negative characters/interactions on the college campus) to avoid possibly risking my chance to stay in the program."

As with a majority of the participants, being a Northern California MCHS student meant one had to make executive decisions about the ways in which they would carry themselves inside and outside of high school and college classrooms. In general, respondents indicated that they developed a level of "maturity" and "independence," both carefully thought-out characteristics respondents internalized that related to their perception of what a typical college student would look like.

Theme Four: Contextual Skills and Awareness

The final theme addressed in David Conley's college readiness framework is contextual skills and awareness. According to Conley (2007), "contextual skills encompass primarily the privileged information necessary to understand how college operates as a system and culture" (p. 17). To assess the knowledge gained regarding contextual skills and awareness, respondents were asked to describe what they learned about college culture. All respondents frequently attributed their experience taking college courses while in high school to their academic success in college. In particular, all respondents stated that they felt academically prepared for college courses and were capable of meeting faculty expectations and college standards after transitioning into their respective 4-year institution.

Faculty Expectations and Academic Standards. College faculty treated participants like college students and held them to the same college expectations and academic standards as their college counterparts, regardless of their status as high school students. For example, Diane stated, "there was no difference in treatment between Northern MCHS and [Community College] students." Amber similarly mentioned, "I didn't really think there was any difference between the two (referring to high school and college expectations) at all." Bianca shared the same sentiment as all of the remaining participants: "The college professors definitely treated me like I was a college student and they held me up to the same standards as the other college students in my class." Essentially, the experience as described by Jake was "…Half high school and half college kind of all rolled into one." However, taking college classes while in high school was perceived as a positive experience that carved out a path to higher education, considering respondents indicated they were ready for the demands of faculty and academics at the university level. For example, Amber stated,

> "I already knew that college required more than what your high school probably required. I think the fact that I already understood how like the culture and how fast it was, how college class didn't do it and how to register for them and how all that worked, so I think that gave me an advantage that I wouldn't have at the normal actual college than some of my peers that was in a regular high school setting before they went to college. I think just being in a college classroom and knowing the culture and the environment gave me an advantage in dealing with that."

Bailey also mentioned feeling prepared for college as a result of having to meet faculty expectations and academic standards earlier on in her educational program. When asked if she felt prepared for college, Bailey mentioned, "Extremely prepared. I understand the college/university system. I know how and where to look for help. I know what university professors expect from students." Similarly, Laura mentioned,

> "I think it is helpful just because it can be intimidating to be included in classes with 'real' college students. As students, I believe we all lived up to the expectations put forth by each individual professor. If a professor treated us like high school students, there were more teenage behaviors exhibited. If the professor treated us like a regular college student, we were able to perform accordingly.

When pinpointing an example of how the culture of the college classroom was learned, Amber attributed faculty expectations and standards within the college classroom to her being able to deal with faculty expectations and standards at the university level.

> "It's funny because like in a class she was hardball, but then when you went to her office, she was willing to work with you and explain why she was so hard towards you. I think with her, and there was another professor I can't remember her name. She was from Africa. I can't remember the country, but both of them basically whipped me into shape… And it's crazy because when I went to… I think they actually prepared me for my university experience because when I went to my undergrad, I was perfectly ready, right. I knew that I needed to make certain deadlines. I just said if I needed help, I needed to go to the professor at the beginning, not wait until the end, after I got my grade. I needed to go to them in the beginning for them to further explain something. I just knew that I needed to speak up and that they would assist me, but it would prompt me to do my homework."

Amber also mentioned a similar experience with another college professor who "challenged" her. She also identified the aforementioned encounter in a college classroom as a

common experience shared among Northern California MCHS students. She stated, "Yeah, I think she [college professor] definitely challenged me more so than the high school teachers. I think they were kind of more relaxed. I mean, I think they just expect us to do great anyway, but I felt like the college professors really challenged us to meet the standards, their standards, especially [college professor]. She really challenged me." Amber's college classroom encounter is what respondents typically faced while at Northern California MCHS. Being able to meet the academic standards and expectations earlier on has advantages. Although at times the academic process was "academically intensive," as SpongeBob described it, the benefits appear to outweigh the challenges. For example, as a result of taking college classes while in high school, SpongeBob stated, Northern California MCHS students " knew what a syllabus was and kinda how college is [referring to academic expectations] before a lot of people- their first year here, and they're like twenty years old." As such, the college experience made it easier for students to understand college enrollment and the process of seeking counseling and support when needed. All participants shared the sentiment that having the experience at Northern California MCHS helped them understand what resources to seek out on a college campus and helped to pinpoint what academic resources they would need to successfully complete their undergraduate program. Amber's comments in regard to seeking out information and support illuminated the experiences that were common among Northern California MCHS alumni:

> "In terms of my classes, in terms of finding resources, going to see my advisor, in terms of stuff like that and joining organizations and stuff, college organizations, I think that I had that experience at Middle College High School so that was easy for me to do and to seek out."

Ashley also described how having the experience of knowing how to enroll in college courses made for an easier transition into her respective college. Particularly, Ashley indicated that she felt prepared for the "academic processes."

> "I feel like I was really well prepared. I got there my first semester and people were failing, trying to figure out how to do this or how to do that. How to register for classes. How to figure out what you want to take. How to get through this whole, all my teachers seem to think this is the only class I have and I have so much homework. It was stuff, not all of it was the exact same as Northern MCHS, but I'd already been through some of the, well how do you deal with professors and how do you set-up appointments for office hours."

High School Seminars. The college classroom was not the only commonly mentioned context or experience that introduced students to the college culture. With regard to information gained at Northern California MCHS pertaining to contextual awareness, several participants indicated that they gained knowledge from high school staff. Patrick, for instance, stated that he learned how to apply for college and financial aid during a high school course, "All of that I would say [Mrs. Teacher] because she'd use a lot of her like class time talking about transferring and apply for college, financial aid maybe. Like after that transfer from middle college period, this is the type of college that in California." This experience was similarly shared with SpongeBob. During his interview, SpongeBob highlighted the contextual skills and awareness received at the high school and community college level.

> "Yeah. They [referring to Northern MCHS] gave you the inroads to what college was like, and what you need to do in order to be successful. Getting the finances and all that. Yeah. I felt like... That's how I learned about the Community Kings Scholarship with [Community College]. I got that scholarship. Yeah. Without [Community] College, I don't think I would've known about that scholarship, or even being able to apply for it. They definitely let you know how to go to college.

One final example presented that brings to the forefront the ways in which high school staff played a role in respondents' knowledge regarding contextual awareness and skills is through Bailey's interview segment. When Bailey was asked about whom provided her information regarding college culture, she indicated there were "multiple people" that informed her of what college would be like. More specifically with financial aid, however, Bailey stated Northern California MCHS played a role regarding the knowledge she gained about college

finances: “I was introduced to the different types of financial aid. I was taught how to apply for each type and who to ask for help.” Learning to ask for help and finding different financial venues were beneficial for Lily because during her tenure at Northern California MCHS, her “legal status” was a challenge. Lily stated she “lack[ed] of government help and inability to receive loans and scholarships. [She] had to choose a college where [she] was able to pay [her] way through it.”

Interestingly, although respondents indicated they gained the experience of faculty expectations and college standards in addition to financial aid and admissions, not all aspects of the college culture were addressed. For example, a handful of the respondents spoke of the transition from a 2-year institution to a 4-year institution as challenging. For example, although Laura felt prepared academically, the context of going from a small institution to a larger context where the student body population was twice the size she experienced in Northern California MCHS was different. Laura stated,

> “At [Northern] MCHS, we were always visibly different from the other students, so it was very easy for professors to identify us and for us to make our mark on them. Going out into the university, I felt like a little fish. At MCHS, we were big fish in a little pond, once I got out of the little pond, I felt like a little fish in a huge pond. I felt very anonymous.”

The same sentiment was echoed by Bianca, who was also taken aback by the larger context of a university and highlighted the differentiation in technology utilization in a 2-year compared to a 4-year classroom: “The main difference between my 4-year and MCHS were the classroom sizes. There were a lot less students in my college classes at MCHS whereas at the university the class size was much larger. Also, the technology used in the classroom differed slightly.”

Essentially, the previous statements can be summarized by Jake's general comment when he mentioned that the transition into college was a "big jump." He continued, "You would think that going through a junior would help you out a little bit, but honestly it doesn't. On the high end it saves you money. Sure. In terms of learning, in terms of difficulty, I believe it's a lot harder and there wasn't really ... not really a big approach, there's not really a big approach, no, to it."

What Does It Mean to Be College Ready?

The college readiness experience for Northern California MCHS alumni was challenging yet rewarding. Upon entering a high school on a college campus, Northern California MCHS alumni articulated that giving up a social agenda was key to their academic preparation. In addition, part of entering a college campus meant that students were held to higher academic and behavioral accountability and responsibility. Expectations for academic success were the norm, and applying to college or developing a post-high-school plan was not out of the ordinary. When taking a close examination of what it means to be college ready from a Northern California MCHS alumni perspective, the process is three-fold.

First, to be college ready means that one must feel academically prepared for college and capable of meeting the expectations of faculty and college standards. Second, an individual is capable of navigating the daily institutional procedures, including but not limited to scheduling and enrolling in college courses. Third, in this case Northern California MCHS alumni are trained and prepared to seek out support and academic resources when needed. The aforementioned tenets coupled with academic behaviors (time management and study skills) helped students' transition and success in college despite not having a holistic understanding of the college climate.

Social Supports

This section is the presentation of the major themes of Northern California MCHS alumni's lived experience of their social supports. Participants were asked to describe what types of supports (if any) were available to them as Northern California MCHS students. Results reveal that social support was instrumental in Northern California MCHS alumni academic success and came from multiple sources. Diane's comment regarding the types of support she received while at Northern California MCHS summarizes what all respondents typically indicated they received along their educational journey into higher education: "I had teachers, family friends, myself as a support system while being a early college student." The most frequently reported support structures are presented and supported by significant statements from participant interview transcriptions in the following section.

Them One: Peer Support

Consistent across all participants, peer support was critical for success in college courses, and the idea of having college classes with other high school students was beneficial to students. Particularly as stated by Bailey, "having students [other peers] was extremely supportive and helpful." In fact, peer support was critical for Bailey, who stated, "I never felt confident taking a college class without other MCHS students there." In addition, several respondents reported feeling comfortable and tending to seek help academically, socially, and emotionally from their peer groups. Having peers to lean on during a time of need was also important because respondents mentioned that Northern California MCHS students "did not communicate" or interact with college students in their college classes often. For example, when asked if he received support from college students during class, SpongeBob stated, "I don't remember interacting with them much." Unfortunately, SpongeBob's experience shows the reality of the

lack of support received from college students academically. While he later mentioned that he communicated more with a handful of college students after joining the college speech and debate team, the general notion and experience was grounded in the reality that when looking to receive academic support from college students, the support was minimal or did not exist.

Thus, depending on high school peers for support was the norm for participants. Peer support was referred to as "a community" for some and a clear fundamental aspect of one's educational support structure for others. An example of how peer support was valued and played a major role in respondents' academic trajectory is shown in Bianca's comment:

> "It was helpful having other high school students in my college classes. My relationship with the high school students was more developed than with the college students during the beginning of the semesters. If I needed help, or couldn't understand something I could call on one of my classmate for help. If there was something we all did not understand, we could get the support we needed together either in a study group or in a MCHS support class."

When Diane was asked about her supports, she stated, "I felt a lot of support from my close friends whom I gained from MCHS because they helped me financially, mentally, and socially. If it wasn't for my friends I probably wouldn't have went to a University but instead Id probably be working to save up." Diane continued, "It [peer support] probably helped because there were other classmates taking the same course and going into the seminar you talked about the things you didn't understand." The peer dynamic was the most popular support structure because it was a safe space for respondents. Ashley echoed this experience by stating, "Conveniently you have a great group of classmates and friends because everyone in my class was really, really close… The main thing for me is it gave it that great sense of community, where I'm still friends with some of the people that I went to school with and I still talk to them." In the absence of peer support Bailey mentioned, "I know that I felt like a fish without water in classes where there were only a couple MCHS students compared to classes where there were a

lot MCHS students." As such, being part of an environment as Laura described, "was also nice" because "everyone had the same intention of going on to college. I did not have that same support from my relatives or other friends that were not attending MCHS" because her relatives and friends back home were unfamiliar with the ins and outs of college as a result of their minimal postsecondary educational background. Laura's sentiment was also echoed by Amber, who mentioned, "I feel like the friendships that I made doing Middle College was very supportive because they were like a little family because there wasn't that many of us and we were all taking the same courses."

Theme Two: Family Support

The second most referenced support system respondents mentioned was family support, which undoubtedly played an integral role in respondents' educational progress. Simply showing support and encouraging their child to attend Northern California MCHS was an indicator of support for higher education. During challenging times, family support was the crux that respondents attributed to their academic matriculation. One example of family support was discussed during Patrick's interview. It was because of his mother mentioning Northern California MCHS and supporting his path to higher education that he was able to develop goals geared toward earning a 2-year degree by the time he completed high school. As mentioned in Patrick's background summary statement, he began Northern California MCHS with the intent of majoring in business. Consequently, he received his associate of arts degree in business and majored in business economics when he transferred to college. Patrick's statement regarding his family support is as follows:

> "Yeah, I think my mom told me about Northern MCHS. Then I heard about you could get an Associate's degree and also you could get a head start. So because of that ... I kind of knew what I wanted ... What kind of maybe I wanted to get into going to college. So then

> I decided like I want to get a head start and I'll just try to get an Associate's degree and maybe I wanted to go into a college."

Family support was also discussed during Amber's interview. In particular, she spoke of how her family approved of her decision to apply and attend Northern California MCHS and thought it was a perfect fit that provided the necessary educational experiences she would need to place her on a path to college. Amber stated,

> "My family liked it for me. They thought that it was right for me because I was academically strong and that was my thing, my niche, but yeah, so they liked it for me. They thought that it was a good thing. It prepared me. I was able to advance a little bit quicker for free."

For SpongeBob, family support was critical during the tough challenges he faced while at Northern California MCHS. According to SpongeBob, his parents "loved" the idea of Northern California MCHS. He stated, "they knew about the cost savings in the long term. They were very much proud of me going to that school." During tough times, and SpongeBob mentioned there were a few of them, "they supported" him. Another instance where SpongeBob mentioned his family support was during his comments regarding his participation on the community college speech and debate team, where he participated in local, state, and national parliamentary debate tournaments. SpongeBob stated,

> "My parents supported me a lot. When I was going to speeches and debate and having those tournaments and stuff, my parents were there. Either my mom or my dad, or both… They supported me a lot. I was showing them my grades, showing them how well I was doing, and they were always very supportive of me. So I had- I have great parents, and they supported me pretty much through all of [Northern MCHS]."

One final example that illuminates the unique contribution of family support in respondents' academic trajectory is derived from Laura's interview data. Laura's parents did not attend college, thus she mentioned that she could not seek knowledge from them regarding college culture or expectations. Interestingly, however, she did indicate that her parents' minimal educational requirements did not hinder her from following a path to higher education. Laura's

parents made sure she participated in opportunities that carved for her an educational path to college. With regard to her parental support, Laura stated,

> "While my parents were all for me going to college, I couldn't turn to them for help with homework. Since they didn't go to college themselves, they couldn't relate to any of my experiences with classes or the college application process. The positive thing about my parents was that they were able to connect me to other resources for me to be able to follow up with any of my educational needs (i.e. trips to libraries/bookstores, computer/internet access, etc.)."

Theme Three: Teacher and Counselor Support.

Several students mentioned that teachers and counselors were instrumental in providing the necessary supports as they navigated the high school and college context simultaneously. More often than not, respondents mentioned that high school staff provided ample opportunities and courses to provide additional tutoring and academic support needed for college classes. Teachers were commonly viewed as always available, filled with "enthusiasm," and willing to provide support whenever a student needed help. An example of teacher and counselor support is echoed in Diane's, Patrick's, and Ambers' interviews. With regard to Diane, she illuminated the support received by high school teachers:

> "Most of the high school teachers there were very supportive. Now that I look back on it the seminars that involved talking about some college courses helped… I think the toughest time I had was in junior year. I was taking Professor [anonymous] course and it challenged me a lot. Not only did I have to worry about her class but I had the rest of the classes from high school/college. What helped me in her class was Mr. [anonymous], he helped a lot with Professor [anonymous] course so it made everything a bit easier."

Similarly, Patrick also stated that high school staff were typically supportive of students:

> "Definitely the teachers were supportive in terms of like higher education. I know like Mr. [anonymous], he came after you did I think. He was an English direct history teacher. He helped me a lot when I applied for college. Like what to write in a personal statement. Yeah, basically just get into a good college or get into college at all I guess. Like he was supportive."

High school staff were able to get to know students on a first-name basis. Recall that Northern California MCHS admits a handful of students with a student population of fewer than 300 students. Within each cohort, it becomes fairly easy to get to know peers on an individual level. Ashley recalled experiencing close interaction with high school staff while at Northern California MCHS and showed how some of her friendships with staff lasted over time.

> "Well the teachers were all, at least teachers I had were all highly supportive. They would come by and chat with you and they actually knew who you were and knew you by name and not just oh you're one of our students or I had you. Some of the teachers still know you by name. I am friends with some of them on Facebook now, [inaudible 09:17] have graduated. Then the counselor for most of my time there was really supportive and really great. The principal my first 2 years was really supportive and really great. Then outside of school I had family and friends who were all really supportive of making sure I got stuff done… It just seemed to be a really good community of people who would come around and say, 'Hey, what do you need? Can I help you with something? Do you need a recommendation? I'll give you a recommendation.' All types of stuff."

Finally, counselors also provided support to students while at Northern California MCHS. In Amber's case, she remembers how her counselor at the high school and college level played a role in making sure she took the right course sequence that aligned with her college major. Amber stated, "I had the support of the high school guidance counselor, Ms. [anonymous], and as well as the college counselor too, guidance counselor, or I think they call them academic advisors. They really helped with planning out my high school curriculum and making sure that it aligned with what I want to do in college."

Do Networks and Support Structures Matter?

Networks and social support, mainly at the high school level, played a considerable role in the college readiness and matriculation process of Northern California MCHS alumni. More often than not, participants indicated that they felt as if they were part of a community where they were able to lean on their peers and high school teachers for support when needed. For example, with regard to peer support, participants shared that they often formed study groups

when someone needed additional academic support with college assignments. Simply asking peers for help created a space where students were able to collectively discuss the expectations of faculty and college assignments to make for a better college experience. Additionally, respondents mentioned that it was helpful to be surrounded by peers who shared similar college goals, and through the creation of interpersonal relationships, participants stated that they developed friendships that lasted beyond high school.

Family support was critical to student academic success as well. Mainly families provided participants encouragement to pursue an educational alternative route to higher education. When asked how parents perceived Northern California MCHS, all of the participants expressed that their families had positive remarks about the program and thought it was a great educational opportunity to carve out a path to college. Families championing participants to pursue Northern California MCHS had an astounding impact on students' ability to succeed. For example, in SpongeBob's case, he indicated that during the hard times his family provided the necessary support and words of encouragement. Even when families did not have an understanding of college due to their educational background, families served as a foundation for motivation to help participants continue with their educational program.

Last and equally important is the support of high school staff, mainly teachers and counselors. Participants noted that teachers frequently offered academic skill workshops to teach them time management and study skills, both of which were identified as critical factors that helped students manage their course load in college. Furthermore, participants articulated that teachers assisted them in applying for college and writing personal statements for college. To this end, teachers played a role in supporting students in their matriculation to college by guiding them through the admissions process. Counselors were helpful in the college readiness and

matriculation process as well. To be specific, counselors helped students align their college course with transfer agreements at their respective 4-year institution.

For the reasons listed prior, participants in this study had the opportunity to utilize Northern California MCHS as a mechanism they can use to navigate higher education. Northern California MCHS Alumni in this work were able to lean on their social support and social network as they transitioned through their college readiness program and essentially into their respective institutions. The college classroom experience, coupled with tutoring sessions as well as seminars that taught Northern California MCHS Alumni study and time management skills, provided the ample context that helped students prepare for college. Northern California MCHS Alumni in this work enrolled and many graduated from college, and attributed their success to their respective MCHS. Thereby supporting literature that finds if students participate in dual enrollment, increase their chances of enrolling, succeeding in college (Adelman, 2006; Berger, Adelman, & Cole, 2010; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). In addition, this work supports research that shows social capital impacts the college readiness experience for students of color.

For example, Farmer-Hinton (2008) conducted a study that examined social capital and college planning of students of color in disadvantaged communities. Findings from her work reveal that "school-based social capital for college-planning tasks and activities of students of color," (p. 152) contributed to student college planning and academic success. Participants had the space and time to fill out college applications and seek help with regard to financial aid applications (Farmer-Hinton, 2008). In addition, the information participants gained about college from staff through college-planning activities helped them rely college information to

their families. Thus school-based social capital, also paved the way to the accumulation of cultural capital.

Cultural capital is unique in this work in the sense that is passed through Northern California MCHS to students. Participants mentioned understanding the importance of Northern California MCHS on their academic trajectory as a result of gaining "valuable knowledge" that guided their academic success. Northern California MCHS Alumni also mentioned this experience as a program that "provides a better life" for them, and an "intellectual advantage" about college culture. Thereby insinuating Northern California MCHS provided the necessary cultural knowledge to help students navigate the transition into and through higher education. Although knowledge regarding the social context was minimal, it does not take away from the fact that students felt they gained the necessary academic information that helped them succeed.

Chapter 6

Integration and Interpretation of Quantitative and Qualitative Findings

In the following section the quantitative and qualitative results are combined to provide a holistic understanding of Northern California MCHS alumni college readiness process, and the role social supports play in their enrollment, persistence, and degree completion. At the conclusion of this chapter, I utilized the integrated findings to critique David Conley's (2007) notion of college readiness. The chapter is organized into the following themes:

1. Key cognitive strategies
2. Key Content
3. Academic behaviors
4. Contextual skills and awareness
5. Social Supports
6. Critique of David Conley's (2007) model

Key Cognitive Strategies. When asked whether Northern California MCHS played a role in helping participants develop cognitive strategies, in particular critical thinking skills, a large percentage (62.2 %) of respondents indicated to a great extent or almost always. To augment quantitative findings and illuminate participants critical thinking development, I asked a sub-sample of participants what role (if any) did Northern California MCHS play in helping students think comprehensively about a situation and/or help students develop reasoned conclusions. Interestingly, Northern California MCHS alumni who were interviewed attributed the development of critical thinking abilities to taking college classes at an early age. Qualitative results show that exposing students at an early age to content that challenges them to think in-

depth and holistically about problems and college assignments introduces a level of thinking grounded in "intellectual openness, reasoning, problem solving, and analysis" (Conley, 2007, pp. 13-14). In addition, and most importantly, the sub-sample of participants highlighted decisions and experiences while in high school that were a result of thoroughly thought out logic and reasoning that was applied to their daily actions in a college environment.

Notably, the display of critical thinking was tied to respondents' perceptions of their positionality and ability to navigate Northern California MCHS as a high school and college student on a daily basis. During the semi-structured interviews, respondents identified points along their educational journey where they reasoned with their high school identity in order to transition into being a college student. From the respondents' perspective, being "rowdy," "loud," or "immature" were problematic characteristics they connected to high school student behavior, and they tended to state that they carried themselves as "mature" college students. The transition into being a college student was a more thoroughly thought out process. Once in the presence of college faculty, respondents mentioned, "knowing how to act" in order to not be labeled as a high school student amongst their college peers. Consequently, Northern California MCHS alumni express the reasoning and calculation for their "maturity," "independence," and ability to perform as college students.

Key Content. Northern California MCHS alumni were asked if taking college courses while in high school in math, science, writing, humanities, languages other than English, and social science prepared them for college majors grounded in those areas. The findings with regard to key content demonstrates that curriculum mechanisms, if implemented, can prepare students earlier on in the educational pipeline for the content expectations and requirements of their major career field. To be specific, tailoring courses to a student's career interest can help

place them on a path of course sequences that will be beneficial to their enrollment and degree completion in college in a major field of their choice. Results show that when Northern California MCHS alumni took college classes while in high school that were related to their college majors, they typically felt prepared, specifically indicating that they were either somewhat, moderately, or highly prepared.

When cross-examining the key content findings with qualitative results, data show that in fact respondents felt that taking college courses in a major of interest prepared them for their major upon transitioning into their respective institution. Case in point was SpongeBob's educational trajectory. Currently, SpongeBob is a police officer in Northern California. He took an abundance of college courses in criminal justice while at Northern California MCHS. He also worked as a student security officer for the community college campus. Upon transferring, he took with him a significant amount of community college classes in criminal justice that prepared him for his major in sociology and criminal justice. SpongeBob undoubtedly attributed his success in his college major to his preparation at Northern California MCHS. SpongeBob's educational trajectory is just one example, but it is reflective of Northern California MCHS alumni who worked to complete course sequences that aligned with their college major.

Academic Behaviors. Based on quantitative findings, respondents indicated that they typically developed time management and study skills that helped them manage college coursework at their respective college or university. When taking a closer look at time management and the study skills Northern California MCHS alumni attained through the interpretative phenomenological data analysis, the importance of time management and study skills is illuminated. Data revealed that learning how to manage multiple assignments in college and high school classes helped students manage their coursework load and employment during

college. This finding supports literature that reveals strong academic habits –like good study habits, etc—are key factors contributing to students' academic success that play a role in student retention in school.

For example, Lotowski, Robbins, and Noeth (2004), found that non-academic factors have a positive influence on college retention and performance. Similarly, Byrd and Ginger (2005) examined the definition of college readiness through the perspective of first-generation urban students. The eight participants included in their study identified time management as "critical for college readiness" (p. 29). In particular, with regard to time management, "participants indicated the importance of this skill when discussing time needed for studying outside class and course-load requirements while trying to manage priorities for work and family" (p. 29). Time management is an important non-academic skill that plays a role in the student college readiness process (Roderick, Nagaoka, & Coca, 2009).

Contextual Skills and Awareness. When taking a critical look at whether students felt prepared for the contextual skills of a college campus, the responses from the quantitative data show that respondents typically felt prepared for college admissions, class scheduling, FAFSA, and college coursework, just to name a few examples.

Interestingly, regarding the college context (campus social climate, extracurricular activities, and financial aid), respondents responses ranged from neutral, disagree, and strongly disagree with regard to gaining that knowledge while at Northern California MCHS, indicating that Northern California MCHS alumni may have not received comprehensive information pertaining to the college context. Recall pertaining to campus social climate, 22.7% disagreed, 31.1% neither agreed nor disagreed, and 46.7% agreed. . With regard to examining knowledge gained at Northern California MCHS about student life, 31.1% disagreed, 28.9% neither agreed

nor disagreed, and 40% agreed. Interestingly, when student life is disaggregated by response category, a higher percentage of respondents (28.9%) neither disagreed nor agreed, while 11.1% strongly disagreed, 20% disagreed, 22.2% agreed, and 17.8% strongly agreed. Finally, with regard to financial aid, Northern California MCHS pertaining to financial aid, 17.7% disagreed, 33.3% neither agreed nor disagreed, and 48.9% agreed. When financial aid results are disaggregated by response category, a higher percentage of respondents (33.3%) neither agreed nor disagreed, while 4.4% strongly disagreed, 13.3% disagreed, 31.1% agreed, and 17.8% strongly agreed. When cross-examining quantitative findings with qualitative results, a handful of respondents highlighted the reason why there was a lack of knowledge gained regarding campus climate. More often than not, Northern California MCHS was centered on preparing students for college academics, while the college context is less emphasized.

Consequently, upon transferring to a 4-year institution, a handful of respondents indicated that they felt like "a fish without water" in classes twice as big as the class sizes at their former community college program. For this reason, contrary to David Conley's (2007) argument that if students understand how colleges operate as a system and culture, respondents in this study still felt isolated upon transitioning into their respective 4-year institution. Simply knowing how college operates does not equate to holistically understanding the context. Furthermore, when transferring to college, respondents lost the social support they received from college faculty and staff that they had for 4 years during high school. In addition, despite knowing how to enroll in college courses and knowing how to meet academic standards, the support that was engrained in a student's curriculum was not the same at a college or university where the cohort that students are entering into is drastically different.

For example, one respondent noted, “I had no peers supporting me in classes.” Diane mentioned, “I felt a bit left out because since everyone else was older they felt a bit superior to me.” Thus, what is to be done for a student who still feels left out and alienated despite knowing how to navigate the typical operation of a college or university? This finding has implications for implementing a curriculum that is simply structured to give students an idea and inside knowledge regarding the organizational structure of 4-year institutions.

Social Supports. Consistent support from peers, family, and high school staff played an imperative role in the academic success for students included in this work. Quantitative results show that although respondents may not have studied together frequently, they indicated that they supported peers when they needed help with college assignments. To be specific, when called upon, respondents had no problem setting aside time to ensure their peers were receiving the necessary academic support. When examining the role of social support from a qualitative lens and through the sub-sample of Northern California MCHS alumni included in this work, social support findings addressed in the quantitative phase are similar to qualitative results.

Moreover, the qualitative results further incorporate the importance of family and high school staff. Respondents attributed the immense encouragement they received from their family members as a key factor to their enrollment in Northern California MCHS and educational pathway to college. Specifically, respondents indicated that their family members perceived Northern California MCHS as a great program and advocated for their children to embark on a path to higher education. Even when family members did not have knowledge regarding college due to their educational background, like Laura’s family, they knew Northern California MCHS was a program that was beneficial to her educational trajectory and also made sure she

participated in educational programs that expanded her knowledge about opportunities to enhance her academic success.

Regarding high school support, Early College Seminars were run by high school staff and served as additional support opportunities for students when they needed supplementary help with college class assignments. More importantly, and most interesting, respondents had the ability to create a seminar at any given time if there was a need to have additional support with college assignments or exams. Results show that high school staff became friends and mentors to students, and those established relationships lasted for years. One interesting finding is the lack of support: respondents stated that they did not receive support from college students whom they shared classes with. Regrettably, despite taking college classes with college students, respondents indicated in both quantitative and qualitative data that the academic support received from college students was minimal to none. For example, respondents indicated that they did not "communicate" or "collaborate" often with college students. Rather, respondents always sought out support from their high school peers who shared the same college classes and high school staff who provided support for their college classes. Essentially, support from college students was not attributed as a key factor that impacted students' enrollment, persistence, and degree completion.

Critiquing David Conley's (2007) Comprehensive College Readiness Framework

David Conley's (2007) comprehensive college readiness model was used as a guide to examine the college preparation of Northern California MCHS alumni. Recall alumni were part of a college readiness program that was developed to increase the college preparation, enrollment, persistence and postsecondary degree completion of traditionally underrepresented students (Lieberman, 2004). As such investigating alumni perception of their preparation made

for a perfect opportunity to critically assess Conley's (2007) model and his notion of college readiness.

After careful review of this study's findings, a key take away from the integration of the quantitative and qualitative results is that Conley's (2007) comprehensive model is limited in its applicability to the college readiness experience of Northern California MCHS alumni. It is limited in the since that Conley's (2007) framework does not come close to providing an inclusive account regarding how Northern California MCHS alumni, prepared for college. The only college readiness components from Conley's (2007) model that were named by Northern California MCHS alumni as important for their college readiness and academic success in college include preparation in the following: key content (taking college classes in a major field while in high school) and academic behaviors (time management, study skills). In addition, contextual skills and awareness were only partially attributed to alumni college success.

Notable findings such as the extensive supports identified by Northern California MCHS alumni, are college readiness elements that are not captured or mentioned in Conley's (2007) model, despite it being a critical component, if not most important, to college access and alumni college matriculation. In addition, Conley's (2007) model does not take into consideration "the contextual needs of the high school as well as the cultural identities of the students, families, and the community it serves" (Welton & Martinez, 2013, p. 4). Because of this, and similar to current research, Conley's (2007) framework dismisses the role of supports, funds of knowledge, a college-going culture, and community cultural wealth that was found to be very important to the educational trajectory of the alumni included in this study (Welton & Martinez, 2013; Yosso, 2005). Consequently, it is readily noticeable that Conley's (2007) conceptual model bypasses essential components of alumni college readiness process that deserves equal attention.

For the reasons, this work supports the development and application of a "culturally responsive approach to college readiness" (Welton & Martinez, 2013, p. 1), and I argue it should serve as a compliment to Conley's (2007) comprehensive college readiness framework. A culturally responsive model takes into consideration the aforementioned findings from this dissertation study and incorporates them into Conley's (2007) model in order to offer a robust way of understanding various attributes of institutions and supports that plays a role in student enrollment, persistence and degree completion. A culturally responsive approach to college readiness is a new developing concept discussed in the literature. Although practices have been identified as mechanisms that increase academic success of traditionally underrepresented students, it is not until recent that scholars have formulated the thought of calling such practices, a culturally responsive approach to college readiness. Informed by the scholarly contributions of Castro (2013), Knight and Marciano (2013), and Welton and Martinez (2013), the idea is that college readiness policy and practice should be "race conscious and equity minded" (Welton and Martinez, 2013) to account for the "the obstacles that chronically underserved students of color disproportionately face in accessing equality of educational opportunity" (Castro, 2013, p. 300). As a result, program administrators and directors are able to implement culturally relevant college readiness techniques that cater to traditionally underrepresented students.

For example, Welton and Martinez (2013) conducted a study that examined the college preparation process for students of color (SOC), specifically "Latina/o, African American/Black, Asian, and multi-ethnic students" (p. 2). Understanding that SOC face systematic barriers that negatively impact their educational pathway (McDonough, 2005), they sought to "explore the structural challenges SOC encounter and the cultural assets SOC utilize to resist challenges in acquiring college preparatory resources" (Welton & Martinez, 2013 p. 2). At the conclusion of

their study, five culturally responsive college readiness approaches were identified. Three were offered from the students' perspective and Welton and Martinez (2013) introduced two additional approaches. The five college ready cultural approaches outlined in Welton and Martinez's (2013) work are as follow:

Student recommendations

1.) Establish relationships built on trust and authentic caring

2.) Integrate college-level work and resources into all courses

3.) Encourage students to earn college credit while in high school

Researcher's recommendations

1.) Providing increased college supports for new immigrant students and their families

2.) Ensuring all personnel recognize and validate that SOC possess assets and potential

Knight and Marciano (2013) in their book titled "College Ready: Preparing Black and Latino/o Youth for Higher Education-A culturally responsive approach" echoes the similar techniques provided by Welton and Martinez (2013), and pin points practices that speak to the college preparation of traditionally underrepresented populations. The tenets of their culturally relevant approach to college readiness include but are not limited to establishing:

1.) A college going-culture

2.) Culturally relevant counseling and teaching pedagogy

3.) Culturally relevant peer groups

The aforementioned practices are beneficial because they are identified as key structural and practical mechanisms that play an integral role in the college readiness, enrollment, persistence and degree completion of traditionally underrepresented students. As such, a culturally responsive readiness approach is a beneficial and a supplemental addition to David

Conley's (2007) college readiness framework because it presents and pinpoints alternative practices students from traditionally underrepresented backgrounds make use of as a means to prepare for college.

Supporting a "Culturally Responsive Approach to College Readiness": Utilizing Findings to Color the Pathway to Higher Education

When combined with culturally responsive techniques and an equity driven lens, Conley's (2007) model can possibly play a role in explaining college readiness and matriculation for all students rather than being a model that is used to explain the college preparation process for students that do not face systematic impediments along the educational pipeline. I describe Welton and Martinez's (2013) culturally responsive college readiness approaches and the way in which Northern California MCHS is situated in their five established suggestions identified in their study to show that Northern California MCHS could be viewed as a model that meets the college readiness needs of traditionally underrepresented students.

Results from this study reveal that Conley's (2007) model partially describes the college preparation process for Northern California MCHS alumni, however when supplemented by Welton and Martinez's (2013) college readiness tenets, it is apparent alumni college readiness and college matriculation are more fully addressed. The case of Northern California MCHS is just one case, and more research is needed to better understand if the culturally responsive practices outlined by Welton and Martinez (2013) are applicable to all MCHS-ECHS, and traditionally underrepresented students in general. However these findings constitute a minor step to understanding the ways in which practices can be viewed conceptually and possibly applied on a larger scale. Welton's and Martinez's (2013) college readiness recommendations are subsequently presented, followed by a brief statement addressing the way in which Northern California MCHS, fulfills the five culturally responsive approaches to college readiness.

- **Establish relationships built on trust and authentic caring**

    - Northern California MCHS alumni mentioned the support they received from high school staff (counselors and teachers). Teachers served as close "friends" that played a role in shaping Northern California MCHS alumni matriculation into college.

- **Integrate college-level work and resources into all courses**

    - Northern California MCHS alumni were part of an educational curriculum that is infused with college coursework. Additionally, alumni identified required Early College Seminars as a designated resource that helped in their endeavors to develop time management and study skills utilized to managed their college assignments.

- **Encourage students to earn college credit while in high school**

    - Northern California MCHS is structured in such a way that allows participants to take college classes while in high school, and alumni indicated that they enrolled in college classes while in high school as early as ninth grade.

- **Provide increased college supports for new immigrant students and their families**
    - One participant mentioned having financial difficulties as a result of her legal status and educational background of her family. However, she indicated that because of Northern California MCHS, she received the necessary supports that guided her in the right direction to college financial resources that suited her needs.

- **Ensure all personnel recognize and validate that SOC possess assets and potential**
    - The simple fact that Northern California MCHS alumni generally agreed and stated that high school staff were supportive indicates that personnel recognized and validated alumni potential to succeed within a college setting. Throughout the duration of the interviews, respondents only spoke of supportive environments where high school staff made themselves available at any time to provide additional academic support. This hints at the idea that staff believes students have potential to succeed and will go out of their way to provide the necessary resources to positively impact their educational progress.

Chapter 7

Contributions, Implications, and Conclusion

Discourse regarding college readiness is complex, and there is no one-way to define the term (Roderick, Nagaoka, & Coca, 2009). Rather, multiple attributes are considered to be college readiness characteristics that students should have in order to be identified as college ready (Conley, 2007). Additionally, various steps along the educational pathway are deemed college readiness indicators that, if taken, increase the odds that a student will enroll in college, persist, and complete a postsecondary degree (Horn & Carroll, 1997). Regrettably, social and institutional barriers impact the educational trajectory of students who are least well-served in education considerably. For this reason, various programs at the local, state, and federal level are developed in order to improve student academic success, especially for traditionally underrepresented student populations (Cabrera, Burkum, & La Nasa, 2005; Cabrera, Deil-Amen, Prabhu, Terenzini, Lee, & Franklin 2006). Middle College High School-Early College High School (MCHS-ECHS) is viewed as a catalyst to addressing college preparation and the high school to college pipeline for traditionally underrepresented students, however, although the program is a popular educational alternative, what is known regarding the educational outcomes of MCHS-ECHS students, and their perception of their college preparation, is minimal.

To address this void in the literature, I developed a pilot study that examined the educational trajectory of a group of Northern California MCHS alumni. The goal of the study was not only to shed light on possible educational outcomes of having participated in the program but also to investigate how alumni perceive their college readiness process and utilize their voices to critically examine the notion of college readiness.

Methodological Overview

This work employed a pilot sequential explanatory mixed method study. Utilizing quantitative and qualitative techniques was critical in order to provide a comprehensive understanding of Northern California MCHS alumni educational experiences. In the first quantitative phase of this study, the following research questions were addressed:

1.) What are the educational outcomes of Northern California MCHS alumni?

2.) How do Northern California MCHS alumni perceive their college preparation for 4-year institutions?

Data was collected from 45 participants via a web-based survey. Based on basic descriptive statistical analysis, it was revealed that the idea of college readiness and the role social supports played in the college readiness and matriculation warranted further investigation through a qualitative lens. Thus, the development of the qualitative phase of the sequential explanatory mixed method design was employed to enhance quantitative results. The interview protocol was developed, and a purposeful sample of 11 Northern California MCHS alumni who participated in the quantitative phase of the study was recruited with whom I conducted in-depth interviews. The qualitative phase was grounded in an interpretive phenomenological data analysis design and addressed the following research questions:

1.) What does it mean to be college ready for Northern MCHS alumni?

2.) Do networks and support structures play a role in the college readiness and matriculation process for Northern California MCHS alumni? If so, how?

Findings from both quantitative and qualitative research were combined and contributed new knowledge to the literature by providing insight into possible enrollment patterns of MCHS-ECHS students by paying close attention to the enrollment activity of a sample of 45 Northern

California MCHS alumni. More importantly, an idea of what it means to be college ready and ways social support structures facilitate matriculation into postsecondary institutions were highlighted (see chapter 6). Finally, the concluding contribution discussed in chapter 6 supports literature that advocates for a "culturally responsive approach to college readiness" (Welton & Martinez, 2013, p. 1). As such, the combination of both Conley's (2007) model and Welton and Martinez (2013) recommendations resulted in an inclusive framework that takes into consideration the college preparation and practices of students that often struggle to navigate the educational pathway, due to systematic structural challenges that negatively impacts their educational progress.

In conclusion, this study hopefully adds to the field of sociology of education and higher education by providing a comprehensive understanding of how the organizational structure, social supports and curriculum in MCHS-ECHS can play a role in the academic success of traditionally underrepresented students that face historical and contemporary forms of discrimination and educational inequity. With that being said, the overall study has implications for the enrollment, persistence and postsecondary degree of traditionally underrepresented students that is worth nothing and is addressed in the following section.

Implications

I reiterate that the implications discussed here are based on results from a relatively small sample and generalizability is not suggested. However MCHS-ECHS is implemented on a national scale and the evidence provided here suggest that through these programs, it is possible to positively impact the college preparation, matriculation and postsecondary degree attainment for the student population it serves. This typically includes, ""low-income youth, first-generation college goers, English language learners, students of color, and other young people

underrepresented in higher education" (Early College High School Initiative, 2013). As such, looking at the possible educational outcomes associated with participating in MCHS-ECHS will help policy makers implement practices that positively impacts student success on a larger scale. The results from this work has implications for the following:

1.) Increasing college preparation, enrollment and degree attainment of traditionally underrepresented students.
2.) Increasing college preparation, enrollment and degree attainment of traditionally underrepresented students in science, technology, engineering and mathematics (STEM) fields.
3.) Making college affordable by allowing students to take college classes while in high school at not cost to them, thus possibly resulting in the reduction of the cost to attend college.
4.) Limiting the time to degree.

Increased college enrollment, degree attainment and time to degree. The design of MCHS-ECHS supports students taking college courses while in high school; as such college enrollment for MCHS-ECHS students begins at an early stage in their educational trajectory (Spence & Barnett, 2008). The simple fact that students begin college in advance places that students are on a path to college enrollment, and more specifically, matriculation into a 4-year institution. For this reason, it is possible that MCHS-ECHS plays a considerable roll in preparing students for college and positively impacting the academic trajectory of traditionally underrepresented students. Regrettably the lack of data and the inability to track students long-term, does not allow researchers to examine this claim (Berger, et al. 2014). This study however,

provides evidence, (although not significant) that matriculation into a 4-year institution is a likely outcome.

These results show that Northern California MCHS alumni started taking college classes while in high school and graduated with on average 60 transferrable college credits. Alumni transferred to 4-year institutions and graduated with their postsecondary degree within 2-3 years. In addition, alumni attended both public and/or private 4-year institutions inside and outside of California. As such, I add to our understanding of enrollment patterns post MCHS-ECHS that is not easily found in the literature. For example, when Berger et al. (2014) conducted an impact study examining the impact of being admitted to an Early College and its relation to postsecondary enrollment at 4-year college/university, they found that being admitted to an Early College did not have an impact on college enrollment. This finding was due to the limitation in the data that were collected (Berger et al., 2014).

Recall that Berger et al. (2014) reasoned that, "because we tracked our full study sample only through the end of Year 6, our data do not allow us to make inferences about the long-term degree attainment rates that would be most useful for answering this question" (p. 18). Consequently, Berger et al. (2014) were unable to address the following question, "what impact do Early Colleges have after students leave the highly structured and scaffolded high school environment? The work presented in this dissertation is not limited in accessibility to alumni information and thus shows that matriculation into a 4-year institution is an educational outcome, therefore showing that there is implication for college enrollment into a postsecondary institution upon graduation from a MCHS-ECHS. To ensure this claim holds, however, more research needs to be conducted to substantiate this finding.

Finally this study has implication for limiting time to degree. Alumni graduated with two years, worth of college credits. Thus when transferring to a 4-year institution, alumni only needed to complete two years worth of college. Typically time to a bachelor's degree is four to five years. Because MCHS-ECHS allows students to take up to two years worth of college courses, students can very well shorten their time to degree by two years.

Increasing underrepresented students in Science, Technology, Engineering and Mathematics. The results from this study also have implications for increasing the enrollment, persistence and degree completion in STEM. Currently there are STEM based early college high schools that places students on an educational trajectory into a science-based major field and career. For example, the National Center for Restructuring Education Schools and Teaching (NCREST), Jobs For the Future, the Middle College National Consortium, as well as school districts in Connecticut and Michigan were just awarded a $12 million dollar grant from the U.S. Department of Education to develop the "STEM Early College Expansion Partnership" (SECEP) (Input citation).

According to the Teachers College Press (2013) "the partnership provides high-quality professional development to teachers in the STEM disciplines (Science, Technology, Engineering and Mathematics) who work with high-need students. SECEP's purpose is to boost enrollment of high-need and minority students in the STEM areas and in early college programs" By implementing three practices subsequently mentioned in this section, the idea is that STEM Early College High Schools will help fulfill the "unmet need" of increasing the number of traditionally underrepresented students interested in and pursuing STEM fields over a five-year time span. To be specific:

> "The project will serve as many as 22,000 students in 15 schools across the targeted districts. Its designers hope that 90 percent of participating high school students will earn

> college credit and at least 60 percent of participants who graduate high school will complete two STEM college courses as part of a pathway leading to postsecondary credentials."

The above-mentioned program is one of many ways MCHS-ECHS's are viewed as pathways to increase STEM participation for students of color. The implementation of STEM-based programs is important considering there is a national imperative to reduce the gap in academic achievement and degree between minority students and their non-minority counterparts, especially in STEM fields.

Decreasing the cost to attend college. Receiving a college education, specifically a bachelor's degree, is commonly seen as a key pathway to increasing economic and social mobility in American society (Early College High School Initiative, 2014; Louie, 2007). Unfortunately, despite the importance placed on the value in a university education, the cost to attend college deters students from considering enrollment. Thus while there is a common conception that college education is important, there is also a common notion that college is not affordable. This is especially the case for lower and middle-income students and families (Perna & Li, 2006). Even, with a financial aid package in hand and college selection known, students and families are still skeptical about how they will afford college.

Consequently, mechanisms are in place at local, state and federal level that assist students, especially traditionally underrepresented students with the cost associated with earning a postsecondary degree. MCHS-ECHS is viewed as an option that can possibly reduce the cost to attend college. Although not substantiated and warrant's further investigation, the fact that students that participate in MCHS-ECHS programs take college courses at not cost to the student, may reduce the amount of coursework students would have to pay for upon transitioning

to college. MCHS-ECHS therefore may reduce student and parent loan debt that would otherwise be taken out to cover the cost of attendance for postsecondary education.

Utilizing a Culturally Responsive College Readiness Model to Inform Praxis

There are implications for practice that are reported in this research. Findings presented in this study support the developing interventions that help practitioners improve their respective MCHS-ECHS programs. First, the findings from the study helped directors, administrators, and leaders consider developing Early College Seminars at their respective MCHS-ECHS. In October 2013, I was selected to facilitate a workshop on college and career readiness for MCHS-ECHS leaders at the 2nd Annual National Early College Conference in Raleigh-Durham, North Carolina. This session was structured to provide leaders and administrators with suggestions for programmatic improvement from Middle College High School alumni (results from this work) who have successfully transitioned into and graduated from 4-year institutions. Session participants walked away with knowledge regarding the educational outcomes of a group of Middle College High School alumni and their advice on how to improve students' college readiness experiences. Session participants were given a one-page worksheet outlining topics that should be addressed in Early College Seminars if implemented. Early College Seminars as identified in the qualitative results of this work are additional classes incorporated into a student's curriculum that serve as tutoring and support sessions. Topics are typically developed address students academic and social needs. The suggestions for programmatic improvement with regard to the implementation of Early College Seminars were universally accepted. Early College Seminar topics that were presented included:

- Financial aid
- Transferring into college

• College climate

• Time management

• Careers

• Additional college course support

In addition, I provided counselors with suggestions regarding topics that can better assist students with their high school to college transition. The topics provided to counselors were suggested to occur during student exit counseling. During exit counseling, counselors or teachers interview graduating seniors. During this time, staff can help students identify college resources that will help students adjust to their respective college campus. Exist counseling can help students locate the following:

• Counseling Center

• Clubs/Organizations

• Tutoring Center

• Financial Aid Office

Within the session, I also provided counselors with suggestions for support tactics to help students who are failing to receive additional academic support from resources at the college and high school level. In particular, I assisted a handful of counselors in their endeavors to create a specialized tutoring learning plan structured to provide students with holistic support at an academic, social, and emotional level, which were informed by the culturally responsive college readiness approach tenets and supporting statements from Northern California MCHS alumni and Welton and Martinez's (2013) college readiness recommendations.

Finally, aside from providing individual and group support to MCHS-ECHS leaders, I am currently assisting a Senior Early College Manager with the development and implementation of

a STEM-based Early College Evaluation Plan. As such, this work also shows that there are several kinds of practices and programmatic applications that are beneficial to the study of current and future MCHS-ECHS programs.

Centralizing Data Collection and Evaluations for all MCHS-ECHS

The exponential growth of MCHS-ECHS is noteworthy, however the data collection process and reporting methods to examine the long-term impact of the program is underdeveloped. Although organizations such as AIR, JFF and MCNC play a considerable role in publishing briefs that speak to college course patters and few programmatic impacts, the data collection between all three organizations vary, resulting in different data collection methods, surveying techniques and statistical analysis. More importantly, there is an inconsistent process for tracking alumni post high school, and it is only until recent that AIR, JFF and MCNC has begun to utilize National Clearing House Data to track MCHS-ECHS alumni. Unfortunately, even with access to NCHD, there is not a common understanding as to what data should be derived from NCHD that will be beneficial in helping scholars examine the long term impact of having participated in MCHS-ECHS. For this reason, what we know regarding the educational outcomes of alumni will remain limited.

The aforementioned constraints established for me, the foundation I needed to envision a centralized MCHS-ECHS data collection center that will serve the evaluative needs for policy makers, administrators and research organizations. Frequent conversations with my advisor Dr. William Trent, including the development of the first Middle College High School Alumni survey utilized for this dissertation work in the Summer of 2008, served as key milestones towards the creation of a center.

The center and evaluation services will support investors, policymakers, practitioners and research organizations in their endeavors to easily locate information to support grant applications and research that is used to generate financial support for the sustainability of their respective MCHS-ECHS. In addition, original funders of the MCHS-ECHS initiative will be able to have reports readily available that speaks to their return investments that can also assist with funding decisions that could be play an integral role in future developments of MCHS-ECHS. Finally and most important, research derived from the center will help program administrators and practitioners make data driven decisions to enhance their respective MCHS-ECHS in order to better serve and meet the needs of participating students.

Limitations

Recall, there are limitations in this dissertation study. First, with regard to data, this study only included graduates of one Middle College High School in Northern California, thus this study does not compare data to other graduates of MCHS-ECHS and is not generalizable to all MCHS-ECHS on a national scale, or even to the state of California. Second, the Facebook page I developed in 2008 to recruit participants for the study was useful for recruiting participants, but inclusion criteria only took into consideration Northern California MCHS alumni who graduated from Northern California MCHS and have completed or are in the process of completing their postsecondary degree. Consequently, students who did not enroll in a 4-year institution, or enrolled at a later time after the study was launched, were not included.

Third and finally, it should be noted that although Facebook served as a critical access point to recruit alumni, it also served as a limitation in this study. Specifically, Facebook does not allow users to send out multiple messages of the same or similar content to users in an effort to reduce or eliminate spam. I was prompted to stop sending survey invites to participants or

have my Facebook account deleted as a consequence. This limited me from further administering my survey to possible participants included in the Northern California MCHS alumni group I created. Furthermore, this limitation also hindered my recruitment of alumni of different MCHS-ECHS's.

Direction for Future Research and Conclusion

Despite the limitation in this work, a review of current literature and results show that there is a clear path set for the development of new studies that examine the educational outcomes of MCHS-ECHS alumni. To be specific, current studies are conducted on a case-by-case basis, and rarely do studies incorporate a cross-comparison of the organizational structure of MCHS-ECHS and student educational outcomes. For example, this study in particular only examines the educational outcomes of MCHS-ECHS alumni from Northern California, but there is room to conduct additional studies that examine the educational attainment of MCHS-ECHS from different states. In addition, comparative studies can be implemented to examine whether the organizational structure of MCHS-ECHS impacts student educational outcomes. Using this current study as an example, Northern California MCHS was located on a community college campus, but there are MCHS-ECHS programs that are partnered with 4-year institutions and not located on a college campus at all. As such, the organizational structure could possibly have an impact on the way in which services are delivered, instruction is carried out, and more importantly, student educational trajectory and should be further investigated.

A second line of future research involves the scalability of MCHS-ECHS so that this program is an opportunity for all students. Regrettably, limitations in funding prohibit many students from engaging in and benefiting from the MCHS-ECHS model. MCHS-ECHS at best is a high school that is dependent on soft money, money that is typically provided through a grant

with a lifecycle that has an expiration date. This means that once the funding is gone, program services, staff, and college readiness opportunities diminish as well. While attending the National Early College Conference in North Carolina, I met directors, administrators, and leaders of the MCHS-ECHS movement seeking funding revenues to support current students and staff. Although the need varied by state and district, the overall limitation in funding sources was problematic. Conducting research on MCHS-ECHS that have sustained their programs for more than 10 years will be beneficial for leaders seeking alternative funding mechanisms to ensure their schools remain a college readiness program for students who need help navigating the path to higher education.

A third line of research is centered on whether or not MCHS-ECHS can play a role in increasing the number of underrepresented students in STEM fields. Recent grant notifications reveal that organizations such as NCREST are developing STEM based Early College schools with the goal of addressing the larger needs of educating the next STEM workforce. In 10 years, it may be useful to conduct a study to examine the impact of STEM based MCHS-ECHS on the college preparation and matriculation of students in science related fields.

A fourth line of research deals with adolescent development of MCHS-ECHS students and will contribute new knowledge that unmasks how accelerated learning in a college context shapes development (psychologically, cognitively, academically, and socially) for traditionally underrepresented groups. As early as 14 years of age (early adolescence), MCHS-ECHS students navigate two roles:

1.) Identity as a high school student

2.) Identity as a college student

Additionally, students who participate in MCHS-ECHS take college classes alongside adults on a college campus throughout the duration of their adolescent years. While there is an abundance of literature that focuses on early adolescent development (10-14 years old) and middle adolescent development (15-17 years old) in K-12 contexts, rarely do we seek to understand how early and middle adolescents develop socially and intellectually within a postsecondary context. For this reason, exploring adolescent development within a postsecondary context where students are situated within a college campus throughout the duration of their adolescent years will contribute to our understanding of college student development for students that began college earlier on in the educational pipeline.

A fifth line of research involves tackling the notion of college readiness with a critical lens. Particularly, what does "readiness" really mean? Given the abundance of indicators utilized to determine student preparation and possible success in college, how is readiness being assessed? More importantly, why are the current indicators, such as test scores in math, English, science, being used as the markers that assess student academic success? Challenging the notion of 'readiness' will generate discourse centered on how research organizations and scholars conceptualize the notion of college readiness. This study is a prime example of how discourse can be centered on the concept of 'readiness'. Participants provided interview data regarding their perceptions of their college readiness process that did not align with Conley's (2007).

For Northern MCHS alumni in this study, being ready for college meant that students felt prepared to transition into college and felt equipped with the necessary knowledge to navigate their respective institution. Interestingly, being college readiness was not a result of GPA or college admission scores. It is okay to have alternative measure of student academic success, especially considering GPA and test scores are not the only indicators of college readiness.

Participants provided an alternative approach to examining the term 'readiness'. While student perception of their readiness does not align traditional indicators (GPA and test scores), this does not mean their perceptions are off the mark. Rather, it illuminates varying mechanisms researchers can consider to assess student college readiness.

In conclusion, the directions for future research are exciting, but what is equally important is the contribution this study makes to our understanding of the educational outcomes of Northern California MCHS alumni and, more importantly, their perception of their college readiness and transition to college. In addition, we get an understanding that although students do not meet all of the comprehensive college readiness requirements outlined by David Conley (2007), they are in an environment where they are receiving "culturally responsive college readiness approaches" that are contributing to their academic success. Given the increasing call for establishing college readiness practices for all students, and traditionally underrepresented students in particular, programs such as MCHS-ECHS are a viable option that can enhance student academic success. The results presented in this work although minimal, have larger implications for increasing college preparation and matriculation of traditionally underrepresented students. MCHS-ECHS has been the "fastest growing pathway model"(Bragg, Kim, Barnett, 2006, p. 14) to higher education, and has been implemented in more than 20 states across the nation. It is a unique model that serves as an example of possible outcomes if meaningful efforts are implemented to address the gap in academic achievement that Gloria Ladson-Billings identifies as "one of the most talked-about issues in U.S. education" (p. 3). It is through this programmatic model that policymakers and practitioners can develop and implement culturally responsive college readiness mechanisms that can help students who typically "have the greatest need of the returns [of] higher education today [but] are often the

ones who have the fewest opportunities to tap into them" (Louie, 2007, p. 2224). If policymakers can better sustain and enhance current MCHS-ECHS programs, we can very well be on our way to implementing a culturally responsive college readiness model on a national scale.

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Appendix A

Institutional Review Board Approval Letter

UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Bureau of Educational Research
College of Education
38 Education Building
1310 South Sixth St.
Champaign, IL 61820

February 7, 2013

Montrischa Williams
Curriculum and Instruction Department
357 Education Building
MC-708

Dear Montrischa,

On behalf of the College of Education Human Subject Committee, I have reviewed and approved the revisions to your research project previously entitled "Accelerated College Preparation: Examining Middle College High School Alumni Perception of Their College Readiness and Transition to College." I find that this project continues to meet the exemption criteria for federal regulation 46.101(b)2 for research involving normal survey procedures where the identifying information is protected.

No changes may be made to your procedures without prior Committee review and approval. Your project number will be 4472 and projects are typically approved for 3 years with annual updates requested. You are also required to promptly notify the Committee of any problems that arise during the course of the research.

Best regards,

Susan A. Fowler
College of Education Human Subjects Review Committee

Cc: Dr. Bill Trent

telephone 217-333-3023 • fax 217-244-0538

Appendix B

Cognitive Interview Protocol

Introduction

You are invited to participate in a study about Middle College High Schools' alumni's perspectives of preparation for college. Current graduate student, Montrischa Williams, will be conducting the study under the supervision of Dr. William Trent, in the Educational Policy Studies Department at the University of Illinois Urbana-Champaign.

Demographics

Before we begin, I'd like to ask a few questions about your experience:

- What year did you graduate from Middle College High School?
- What is the name of the four-year college in which you enrolled?
- Were you considered a transfer student when you entered your four-year college?
- What are you studying? Department, college, etc.
- Where are you currently in your college program?

Instructions

In a moment I will give you a part of the survey we are currently developing. Your directions are to read each item aloud; then describe out loud (in your own words) what you're thinking while you respond as if you were at home taking the survey by yourself. Please do not be concerned if you do not understand part of an item. Let me know if you don't understand any part of an item, and feel free to make suggestions about how to make the item clearer.

Middle College High School Survey
Item Review

This section of this survey is designed to gain a sense of how you felt you were prepared for college. Now that you are in or have graduated from a four-year university, you are in a great position to reflect on your undergraduate experience and reflect on your academic, and social preparation for college.

Directions: Please indicate the extent to which you felt taking college courses while in high school prepared you for college level work in:

	Not Prepared at All	Prepared Somewhat	Moderately Prepared	Highly Prepared	Not Applicable
Writing	1	2	3	4	5
Reading workload	1	2	3	4	5
Humanities	1	2	3	4	5
Social Sciences	1	2	3	4	5

This section of this survey is designed to gain a sense of how you feel about acquiring or not acquiring college skills while at Middle College High School.

Directions: Please indicate the extent to which you feel you developed college skills (e.g., study skills, time management) while at Middle College High School

	Not at All	Very Little	Somewhat	To a Great Extent	Almost Always
I developed time management skills	1	2	3	4	5
I developed study skills that helped me prepare for college exams and assignments	1	2	3	4	5
I developed confidence in my ability to perform college coursework	1	2	3	4	5

Now that you are currently in or have been through college, please tell provide information about your undergraduate experience.
Directions: Please rate your undergraduate experience on a scale of 1 to 5, 1 being the lowest and 5 the highest.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I felt I could handle coursework in my college courses	1	2	3	4	5
My peers are smarter than me	1	2	3	4	5
I was viewed as a smart student	1	2	3	4	5
My peers treated me differently because of my high school background	1	2	3	4	5

Appendix C

Facebook Recruitment Message

Hello_____,

You have been invited to participate in my study about Middle College High Schools' alumni's perceptions of their academic preparation for college. Your participation in this study will provide rich insight on the academic pathways of Middle College Alumni that are currently in or have graduated from four-year institutions.

I value your opinion and your participation in this project is very important. After reading a brief consent form, you will have the opportunity to complete the questionnaire. The survey takes approximately 30 minutes to complete. Please note that your responses will be kept completely confidential and you can choose to discontinue your participation at any time.

Middle College High School Alumni Survey
[Link included here]

Thank you for taking the time to contribute your thoughts and experiences. I look forward to hearing from you.

Cordially,
Montrischa M. Williams
Middle College High School Alumni c/o 2006
Graduate Student, Educational Policy Studies
University of Illinois at Urbana-Champaign

Appendix D

Survey Instrument: Middle College High School Alumni Survey

Welcome

ID: 2

Thank you for your willingness to take the Middle College High School Alumni Survey. Middle College High School is a comprehensive high school that is structured to provide the necessary environment and curriculum for students to prosper and grow academically. This survey is designed to capture your perceptions of your academic preparation for postsecondary institutions, as well as your experience in college. The survey is comprised of the following parts:

o Background Information
o Academic Preparedness
o College Skill Preparedness
o Social Supports
o College Awareness
o Overall College Experience
o Financial Aid
o Parental Information
o Additional Background Information

Please allow 30 minutes to complete the questions.

Prior to the survey, you will be asked to read a consent form. Should you agree to the consent form, you will be directed to the survey. Completion of the survey is entirely voluntary. Your decision to participate will not affect your relationship with your university or the University of Illinois. The responses you provide will be held in the strictest confidence and you will not be identified in any report or presentations about this research.

If you have any questions about your participation, the study itself, or privacy issues, please contact Dr. William Trent, the Principle Investigator, by telephone at (217) 333-6153 or via email at w-trent@illinois.edu. You may also contact the Institutional Review Board at (217) 333-2760 with questions about the current research project and consent process. You may call collect if you identify yourself as a research participant. Thank you for your time and consideration.

Sincerely,

William T. Trent
Principal Investigator
Professor, Educational Policy Studies
of Illinois Urbana Champaign

Montrischa M. Williams
Researcher
Graduate Student
Education Policy Studies
University of Illinois at Urbana-Champaign

Voluntary Consent Form

Page exit logic: New Page Logic ActionIF: Question #1 = ("Yes") THEN: Jump to page 3 - Background Information

Page exit logic: New Page Logic ActionIF: Question #1 = ("No") THEN: Jump to page 16 - Survey Decline

ID: 3

Hello! My name is Montrischa Williams, I am currently conducting a research project at the University of Illinois Urbana Champaign, under the supervision of Professor William Trent, the Responsible Principal Investigator monitoring this study. This study focuses on graduates of Middle College High School and their perceptions of their academic preparation for postsecondary institutions and experience in college.

Approximately 30 Middle College High School graduates will be asked to participate. If you choose to participate in the project, you will spend roughly 30 minutes completing this constructed student survey. Your identity will remain anonymous throughout this study. In addition your survey will remain in a secured location that the researcher (myself) will only have access to.

The dissemination of the results will be in the form of poster presentations, thesis, articles, and oral presentations. We hope that the results will increase our understanding about Middle College High School and its role in student academic achievement beyond Middle College High School.

Your participation in this study is voluntary. This means that you can decide whether or not you want to participate in this project. If you do not want to submit a survey, you do not have to respond and there will be no harmful consequences. Codes will be used to replace identifying information and names in any distribution of the research. I am the only one with access to the email account, which you will send your survey to, if you are willing to participate.

The risks of participation are minimal. Maintaining anonymity and confidentiality of the participants in the study will minimize risks.

If you have any questions, you may contact Dr. William T. Trent (email: w-trent@illinois.edu or

phone: 217-333-6153) or Montrischa Williams (email: willia52@illinois.edu or phone: 510-691-0195). For questions about rights as a participant in research involving human subjects, please feel free to contact the University of Illinois Institutional Review Board (IRB) Office (irb@uiuc.edu or 217-333-2670), or Anne Robertson (arobrtsn@uiuc.edu or 217-244-0515) in the Office of School University Research Relations (OSURR). You are welcome to call collect if you identify yourself as a research participant.

Thank you for your cooperation,

William T. Trent
Principal Investigator
Professor, Educational Policy Studies
University of Illinois at Urbana-Champaign

Montrischa M. Williams
Researcher
Graduate Student
Education Policy Studies
University of Illinois Urbana Champaign

ID: 4

*1) I agree to participate in this survey?**

- Yes
- No

Background Information

Page exit logic: New Page Logic ActionIF: Question #36 = ("Yes") THEN: Jump to page 13 - Background Continued

Page exit logic: If you have No siblingsIF: Question #36 = ("No") THEN: Jump to page 4 - Academic Preparedness

Page exit logic: SiblingIF: Question #36 = ("I prefer not to answer") THEN: Jump to page 4 - Academic Preparedness

Page exit logic: siblingIF: Question #36 = ("Not applicable") THEN: Jump to page 4 - Academic Preparedness

ID: 5

2) How did you hear about Middle College High School?*

Validation: Min. answers = 1 *(if answered)*

ID: 6

*3) Where was your Middle College High School located?**

College:

City/State:

ID: 7

*4) Who most influenced your decision to attend Middle College High School?**

- Guidance Counselor
- Parent
- Peers
- High School Teacher
- Minister
- Sibling
- Family Friend
- I prefer not to answer
- myself

ID: 11

5) What year did you graduate from Middle College High School?*

ID: 12

6) What was your ending high school GPA upon graduating from Middle College High School? (If you prefer to not answer the following statement, please type "Prefer not to Answer-PNA" in the text box)*

ID: 125

7) What was your ending college GPA? (If you prefer to not answer the following statement, please type "Prefer not to Answer-PNA" in the text box)*

ID: 13

*8) How many college credits did you accumulate upon graduating from Middle College High School?**

- 0-10
- 10-20
- 20-30
- 30-40
- 40-50
- 50-60
- 60-70
- 70-80
- 80-90
- 90-100
- More than 100 college credits
- I prefer not to answer
- Not applicable

ID: 121

*9) Where you able to transfer your college credits to your undergraduate institution?**

- Yes
- No
- I prefer not to answer
- Not applicable

ID: 122

If yes, How many college credits were you able to transfer?

ID: 14

*10) Did you receive your Associate of Arts degree upon graduating from Middle College High School?**

- Yes
- No
- I prefer not to answer
- Not applicable

ID: 15

11) In what year did you enroll/start college?*

ID: 16

*12) What was your status when you enrolled in your undergraduate institution?**

- Freshman
- College Sophomore
- College Junior
- College Senior
- Transfer Student

ID: 17

13) What is the name of your undergraduate institution in which you enrolled?*

ID: 18

*14) Did you receive your Bachelors degree?**

- Yes
- No, In progress

Validation: Min. answers = 1 *(if answered)*

ID: 19

*15) In what month and year did you/will you earn a degree from your undergraduate institution?**

Month:

Year:

ID: 20

16) In what major field did/will you receive your degree?*

ID: 21

*17) Who most influenced your decision to attend college?**

- ☐ Guidance Counselor
- ☐ Parent/guardian
- ☐ Peers
- ☐ High school teacher
- ☐ Minister
- ☐ Sibling
- ☐ Family Friend
- ☐ I prefer not to answer
- ☐ Other

Academic Preparedness

Thank you providing information about your background. The second section of this survey is designed to gain a sense of how you felt you were prepared for college. Now that you are in or have graduated from a four-year university, you are in a great position to reflect on your undergraduate experience and reflect on your academic, and social preparation for college.

ID: 22

*18) Directions: Please indicate the extent to which you felt taking college courses while in high school prepared you for college level work in:**

(*Please note: If you did not have to take classes within a field listed at your college/university, you may select "Non applicable")

	Not Prepared at All	Somewhat Prepared	Moderately Prepared	Highly Prepared	Not Applicable
Math	○	○	○	○	○
Science	○	○	○	○	○
Writing	○	○	○	○	○
Reading	○	○	○	○	○

Workload					
Humanities (ex: Art, Drama)	○	○	○	○	○
Language Other than English (ex: French, Spanish)	○	○	○	○	○
Social Sciences (ex: Sociology, Psychology, Political Science)	○	○	○	○	○

College-Skills Preparedness

This section of the survey is designed to gain a sense of how you feel about acquiring or not acquiring college skills while at Middle College High School.

ID: 30

*19) Directions: Please indicate the extent to which you feel you developed college skills (e.g., study skills, time management) while at Middle College High School that helped prepare you for college.**

	Not al All	Very Little	Somewhat	To a Great Extent	Almost Always
I developed time management skills	○	○	○	○	○
I developed study skills that helped prepare me	○	○	○	○	○

for college exams					
I developed study skills that helped prepare me for college assignments	○	○	○	○	○
I developed confidence in my ability to perform college coursework	○	○	○	○	○
I felt I had become a responsible student	○	○	○	○	○
I developed critical thinking skills	○	○	○	○	○

ID: 37

*"Critical Thinking" is defined as the mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it."

Social Supports

Thank you for answering questions about college-skills preparedness. The next sets of questions ask about social supports in MCHS and college.

ID: 38

*20) Directions: Please rate the following social supports you experienced at MCHS**

	Never	Rarely	Sometimes	Most of	Always

				the Time	
My peers and I support one another	○	○	○	○	○
I frequently form study sessions with my peers	○	○	○	○	○
I often study with my peers	○	○	○	○	○
I received support from my peers when I needed help on class assignments	○	○	○	○	○
I feel comfortable talking to my teachers/ college professors	○	○	○	○	○
I received academic support from teachers/college professors if I have trouble with assignments	○	○	○	○	○

ID: 45

*21) Directions: Please rate the following social supports you experienced in COLLEGE**

	Never	Rarely	Sometimes	Most	Always

				of the Time	
My peers and I support one another	○	○	○	○	○
I frequently form study sessions with my peers	○	○	○	○	○
I often study with my peers	○	○	○	○	○
I received support from my peers when I needed help on class assignments	○	○	○	○	○
I feel comfortable talking to my teachers/ college professors	○	○	○	○	○
I received academic support from teachers/college professors if I have trouble with assignments	○	○	○	○	○

College Awareness

The next sets of questions are designed to gain a sense of how you feel about acquiring or not acquiring knowledge about college admissions process while at Middle College High School.

ID: 52

*22) Directions: Please indicate the extent to which you feel you developed knowledge about the following while at Middle College College High School:**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
College Admission Requirements	○	○	○	○	○
Federal Application for Student Financial Aid (FAFSA) application processes	○	○	○	○	○
How much it would cost to attend college	○	○	○	○	○
Required college admission entrance exams (ex. SAT and ACT)	○	○	○	○	○
Campus resources (ex. counseling center, career center, tutoring)	○	○	○	○	○
College coursework	○	○	○	○	○

Campus social climate	○	○	○	○	○
Career opportunities	○	○	○	○	○
College majors	○	○	○	○	○
Student life (ex. student clubs and organizations)	○	○	○	○	○
College faculty expectations of college students	○	○	○	○	○
Financial Aid packages	○	○	○	○	○

Overall College Experience

Now that you have experienced college, please provide information about your overall college experience.

ID: 64

*23) Directions: Please rate your overall college experiences from strongly disagree, the lowest to strongly agree the highest:**

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I was often involved in extracurricular activities on my campus (ex. clubs)	○	○	○	○	○

I made a lot of friends when I first started college	○	○	○	○	○
My peers treated me differently because of my high school background	○	○	○	○	○
I did not fit in socially	○	○	○	○	○
Other students often asked me for help	○	○	○	○	○
I felt I could handle coursework in my college courses	○	○	○	○	○
My college coursework was difficult	○	○	○	○	○
I had a hard time understanding course assignments	○	○	○	○	○
I was able to manage my coursework	○	○	○	○	○
I had a hard time adjusting to college	○	○	○	○	○

Financial Aid

The next sets of questions are designed to understand the financial aid you received while in college

ID: 76

*24) Please indicate the type of financial aid assistance you received while in college:**

	N/A	Merit-Based or academic based scholarship	Need based scholarship	Athletic scholarship	Other type of scholarship	Grants	Loans	Work Study	PNA
Freshman	☐	☐	☐	☐	☐	☐	☐	☐	☐
Sophomore	☐	☐	☐	☐	☐	☐	☐	☐	☐
Junior	☐	☐	☐	☐	☐	☐	☐	☐	☐
Senior	☐	☐	☐	☐	☐	☐	☐	☐	☐

ID: 81

*25) Do you/did you work while in college?**

- ○ Yes
- ○ No

ID: 82

If you selected yes, how many hours do/did you work a week?

- ○ 0-5
- ○ 5-10
- ○ 10-15
- ○ 15-20

- 20-25
- 25-30
- 30-35
- 35-40
- More than 40

ID: 83

Do you/did you work on-campus, off-campus or both?

- On-campus
- Off-campus
- Both
- I prefer not to answer

Financial Aid continued

ID: 84

*26) Do you currently have student loan debt?**

- Yes
- No
- I prefer not to answer
- Not applicable

ID: 86

If yes, what is the estimated amount of your current undergraduate loan debt?

- Less than $1,000
- $1,000 to $9,999
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 to $199,999
- $200,000 or more
- I prefer not to answer

- Not Sure
- Not Applicable

ID: 85

*27) Did your parents or primary guardian take out a loan to cover your cost to attend college?**

- Yes
- No
- I prefer not to answer
- Not applicable

ID: 87

If yes, what is the estimated amount of the educational loan that your parent/guardian took out on your behalf to cover your cost to attend college?

- Less than $1,000
- $1,000 to $9,999
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 to $199,999
- $200,000 or more
- I prefer not to answer
- Not Sure
- Not Applicable

Parent Information

As you may recall, completion of the survey is entirely voluntary. Your decision to participate will not affect your relationship with your university or the University of Illinois. The responses you provide will be held in the strictest confidence and you will not be identified in any report or presentations about this research.

ID: 89

Directions: This section of the survey asks about your parental background and additional background information. Please answer the questions the best to your ability:

ID: 90

*28) Did you grow up in a single parent or guardian home?**

- Yes
- No
- I prefer not to answer
- Not applicable

ID: 91

*29) During your senior year in high school, were both your parents/guardians employed or did only one of them work outside the home?**

- Both employed
- Only father/male guardian worked
- Only mother/female guardian worked
- I prefer not to answer
- Not applicable

Validation: Min. answers = 1 *(if answered)*
ID: 92

What was your father/male guardians job title and in what industry did he work?
(if you are not sure, please input "not sure" in the text box, if this statement does not apply, please state "does not apply in the text box)

Job Title:

Industry:

Validation: Min. answers = 1 *(if answered)*
ID: 93

What was your mother/female guardians job title and in what industry did she work?
(if you are not sure, please input "not sure" in the text box, if this statement does not apply, please state "does not apply in the text box)

Job Title:

Industry:

ID: 94

*30) As a senior in high school, what is the highest level of formal education that your father or primary male guardian in your household had attained?**

- No father/primary male guardian in household
- Less than a high school graduate

- ○ High school graduate
- ○ Some college/vocational school
- ○ Associate's degree
- ○ Bachelor's degree
- ○ Some graduate school
- ○ Master's degree
- ○ Law degree (LLB, JD)
- ○ Medical degree (MD, DDS, DVM, etc.)
- ○ Doctoral degree (PhD)
- ○ Don't know
- ○ I prefer not to answer

Validation: Min. answers = 1 *(if answered)*
ID: 96

31) If your father or primary male guardian attended college, what institution did he attend?

Name: _____

City/State: _____

ID: 95

32) As a senior in high school, what is the highest level of formal education that your mother or primary female guardian in your household had attained? *

- ○ No mother/primary female guardian in household
- ○ Less than a high school graduate
- ○ High school graduate
- ○ Some college/vocational school
- ○ Associate's degree
- ○ Bachelor's degree
- ○ Some graduate school
- ○ Master's degree
- ○ Law degree (LLB, JD)
- ○ Medical degree (MD, DDS, DVM, etc.)
- ○ Doctoral degree (PhD)
- ○ Don't know
- ○ I prefer not to answer

Validation: Min. answers = 1 *(if answered)*

ID: 97

33) If your mother or primary female guardian attended college, what institution did she attend?

Name:

City/State:

Additional Background Information

Page exit logic: New Page Logic ActionIF: Question #36 = ("Yes") THEN: Jump to page 13 - Background Continued

Page exit logic: Copy of New Page Logic ActionIF: Question #36 = ("No") THEN: Jump to page 14 - Additional Information

Page exit logic: Copy of Copy of New Page Logic ActionIF: Question #36 = ("I prefer not to answer") THEN: Jump to page 14 - Additional Information

Page exit logic: Copy of New Page Logic ActionIF: Question #36 = ("Not applicable") THEN: Jump to page 14 - Additional Information

ID: 98

*34) What is your gender?**

- Male
- Female
- Other
- I prefer not to answer

ID: 99

*35) Are you the first in your family to go to college?**

- Yes
- No
- I prefer not to answer

ID: 9

*36) Do you have any siblings?**

- Yes

- No
- I prefer not to answer
- Not applicable

ID: 100

*37) What race/ethnicity would you consider yourself?**

- Asian/Pacific Islander
- Black/African-American
- Caucasian
- Hispanic
- Native American/Alaska Native
- Other/Multi-Racial
- Decline to Respond

Background Continued

ID: 10

38) Did any of your siblings attend Middle College High School?

- Yes
- No
- I prefer not to answer
- Not Applicable

Additional Information

You are Almost Done! Just a few Questions Remaining!

Page exit logic: New Page Logic ActionIF: Question #40 = ("Yes") THEN: Jump to page 15 - Contact Information

Page exit logic: Copy of New Page Logic ActionIF: Question #40 = ("No") THEN: Jump to page 17 - Thank You!

ID: 101

39) I greatly value your input, comments and suggestions. Input from former alumni helped me develop this survey. Do you have any comments or suggestions to improve this survey?
(In addition if there was a topic or experience not addressed in the survey that pertains to your preparation for college, please feel free to utilize this space to provide me with greater insight)

ID: 102

*40) There are times when survey research is not efficient enough to capture the feelings and thoughts of survey respondents. Would you be willing to have a follow up interview with the researcher (myself) at another time if additional information is needed to complete data collection and analysis?**

- Yes
- No

Contact Information

ID: 103

41) Contact Information

Name:

Email:

Number:

Other ways you can be reached:

Survey Decline

Logic: Hidden unless: Question #1 = ("No")
ID: 104

You have declined to participate in the study. However, if you have any questions, you may contact Dr. William T. Trent (w-trent@ad.uiuc.edu or 217-333-6153) or Montrischa Williams (willia52@illinois.edu or 510-691-0195). For questions about rights as a participant in research involving human subjects, please feel free to contact the University of Illinois Institutional Review Board (IRB) Office (irb@uiuc.edu or 217-333-2670), or Anne Robertson

(arobrtsn@uiuc.edu or 217-244-0515) in the Office of School University Research Relations (OSURR). You are welcome to call collect if you identify yourself as a research participant.

Sincerely,

William T. Trent
Principal Investigator
Professor, Educational Policy Studies
of Illinois Urbana Champaign

Montrischa M. Williams
Researcher
Graduate Student
Education Policy Studies
University of Illinois at Urbana-Champaign

Thank You!

ID: 1

Thank you for participating in this study and for your time. We greatly value your input and insights. If you have any questions regarding the study, please contact Dr. William Trent at w-trent@illinois.edu, with the subject title "Student Study." Thank you again for your time.

Appendix E

Middle College High School Alumni Interview Protocol

Pseudonym:
Date:
Time of Interview:

Student Experience

1. What was your initial expectation of MCHS when you were accepted into the program?
2. Tell me what it means to you to be a middle college student?
3. Describe your experience being a high school student and college student at the same time? (Follow-up question). Describe a time when you received the necessary support to manage those two roles at the same time?
4. How was your experience taking college classes with community college students at an early age?
5. Describe how college professors at MCHS interact with you? (probe: did they view you as a college student).
6. Did you feel as if you gave up aspects of your adolescent experience by enrolling in MCHS? (Probe: If so, how?)
7. Describe your level of maturity while at MCHS.
   (Probe: Describe a time at MCHS when you felt you made a mature decision)
8. Do you feel your experience was different from peers that went to a traditional high school? (probe: if so, how?)
9. How do you feel about your high school being on a college campus?

Support

1. Describe for me the types of support you had or did not have available to you as an middle college student.
2. Can you tell me what it was like having other students from your high school in your college classes with you? (probe: was it helpful or supportive for you)

College Readiness

Academic Preparedness

1. Describe your academic preparation?
2. How prepared academically do you think you were to continue with your college education after high school?
3. How prepared academically do you think you were for your major?
4. Compared to other students in your college courses did you feel more or less prepared than them?

Academic Behaviors

1. Describe your study habits? (Probe: How are they different from how you studied in high school)?
2. How did your Middle college experience impact your study habits?
3. How did your Middle college experience impact your time management skills?

Key Cognitive Factors

1. Can you describe how confident you are in your ability to think critically?
2. How did your middle college experience affect your ability to use critical thinking skills?

Contextual Skills/Awareness

1. How would you describe your transition from a dual enrollment college student to a traditional college student?
2. Who were some of the people who helped you learn the college culture?
3. How did you make your decision about what college you wanted to attend?
4. How did your Middle college experience prepare you for applying for financial aid?
5. How did your Middle college experience prepare you for interacting with college professors?

Transitioning to College

1. Describe your experience transitioning to your 4-year university post MCHS.
2. How did you select your major?
3. Describe your experience in your college courses at your 4-year university. Is this experience different from your MCHS experience?
4. Describe your interaction with your peers upon transitioning to a 4-year university.
5. Did you tell people you were a MCHS student? If so, how did they react?

Final Thoughts

1. If you had to give advice to new Middle college students what would you tell them?

2. How could the Middle college experience have better prepared you for college?

Appendix F

Memo Template

Accelerated College Preparation:
A Pilot Study Examining Middle College High School Alumni
Perception of their College Readiness and Transition to College

Pseudonym	Date and Time	Notes