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Los Angeles

Early College High School:

Closing the Latino Achievement Gap

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Education

by

Kristen Ann Beall

2016

ABSTRACT OF THE DISSERTATION

Early College High School:

Closing the Latino Achievement Gap

by

Kristen Ann Beall

Doctor of Education

University of California, Los Angeles, 2016

Professor Christina A. Christie, Chair

The population of United States Latino students is growing at a rapid rate but their academic achievement lags behind white and Asian students. This issue has significant consequences for the nation's economy, as the job market continues to demand more education and better skills. Early College High School programs have the potential to improve educational outcomes for underserved students by combining comprehensive high school curricula with supported postsecondary dual enrollment opportunities.

Through a combination of student focus groups, staff interviews, observations, and document review, this qualitative study explored how secondary and postsecondary institutions can work together to create comprehensive dual enrollment programs that lead to increased academic achievement for Latino students. The study relied on the social cognitive career framework and Early College High School programs' theory of change to identify critical cultural and structural supports that resonate specifically with

Latino students. The research focused on 12th grade Latino students and staff at two Early College High Schools in Central California.

Findings revealed that Early College High School programs embrace a robust core curriculum, serving to remediate academic skills while also preparing students for rigorous postsecondary coursework. Programmatic structures collaboratively respond to student needs while providing supported postsecondary experiences, encouraging improved self-efficacy, changed outcome expectations, and expanded personal goals. Multilayered teacher supports also resonate with Latino students in Early College High School programs, as illustrated by program-wide college-going cultures that include high expectations and trusted relationships. Finally, Early College High Schools support highly enculturated families fostering increased levels of college knowledge and engagement. The findings show that Early College High School programs can offer Latino students a pathway for postsecondary access and improved levels of academic achievement.

The dissertation of Kristen Ann Beall is approved.

Mark Kevin Eagan

Linda P. Rose

James W. Stigler

Christina A. Christie, Committee Chair

University of California, Los Angeles

2016

DEDICATION

This dissertation is dedicated to my mother and father who have illustrated the value of hard work, determination, and perseverance at every pivotal moment of my life. To Karyn and Dennis, whose unwavering support has made this journey possible. And finally, to my children Taylor and Morgan, you are a constant source of encouragement and motivation. Thank you for encouraging and believing in me.

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Thank you to the students and staff at both research sites for so willingly sharing your thoughts and experiences. You allowed me so see the possibilities for generations of students to come. To the UCLA Educational Leadership Program's Cohort 21, I could not have done this without each and every one of you. Your heartfelt encouragement allowed me to push through the challenges. I know I have become a better person for having known each and every one of you.

Finally, to my family and friends, who have supported me throughout this journey, thank you for your patience and understanding. I would not have been able to reach this milestone without your love and support.

VITA

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CHAPTER 1:

PROBLEM STATEMENT

The Latino population in the United States is growing at an exponential rate. According to data from the U.S. Census Bureau (2015), an estimated 55 million Americans identified as Latino in 2014, representing more than 17 percent of the U.S. population. Much of the growth is concentrated in the school age population, where one in four children under age 18 is Latino (U.S. Census Bureau, 2015). Despite these numbers, only 76 percent of Latino students graduated from high school in 2013–2014, compared to 87 percent of white students and 89 percent of Asian students (National Center for Education Statistics [NCES], 2015). Likewise, only 59 percent of Latino high school graduates immediately enroll in college, compared with 69 percent of white students and 80 percent of Asian students (NCES, 2014). The gap widens with degree attainment: 46.9 percent of whites earn an associate's degree or higher, compared to only 22.7 percent of Latinos (Ryan & Bauman, 2016). These data suggest that while many efforts to close the achievement gaps for Latino students may be working, there is still a need to address inequities. This issue has enormous consequences for the United States, as the job market continues to demand more education and Latinos make up a larger and larger portion of the workforce.

The Project

Using a combination of student focus groups, staff interviews, observations, and document review, this qualitative study explored how secondary and postsecondary institutions can create comprehensive dual enrollment programs that lead to increased opportunities for Latino students. I examined two Early College High School (ECHS) programs in Central California that combine a comprehensive high school curriculum with postsecondary dual

enrollment opportunities to increase academic rigor, improve student self-efficacy, and redirect the life trajectories of many of their graduates. The study looked specifically at the structural and cultural supports embedded in each of the programs to better understand opportunities for impacting Latino achievement.

Background Information

Often called the breadbasket of America, California's San Joaquin Valley, part of the state's Central Valley, is an area of rich farmland that is a key support to both the regional and state economies. California has led the nation in net farm revenue since 1948 (U.S. Department of Agriculture Economic Research Service, 2015), with agriculture now accounting for over 1.5 million California jobs (California Community Colleges, 2012). Approximately half of California's agricultural jobs are in the San Joaquin Valley (Employment Development Department, 2014); this includes Kern, Kings, and Fresno counties, where 70 percent of the land is in agriculture and 30 percent of the workforce is in the agriculture sector (Employment Development Department, 2015). The California Community Colleges (2012) publication *Doing What Matters* identified agriculture, water, and environmental technologies as a priority sector for the Central Valley region, specifically identifying jobs in modern agriculture that go far beyond "picking and packing."

Despite the fact that the industry's growth creates high skill, high wage jobs within its local communities, the San Joaquin Valley is consistently plagued by high unemployment and poverty rates. The disconnected youth rates in Kern and Fresno counties exceed 20 percent—that is, at least one in five youth between the ages of 16 and 24 are neither enrolled in school nor employed (Lewis & Burd-Sharps, 2014). Latino students accounted for 60 percent of high school students (Grades 9–12) in 2012–2013, and while an encouraging 81 percent graduated from high

school in that same year, a mere 30 percent had met the entrance requirements for either the University of California (UC) or California State University (CSU) systems (California Department of Education, 2015). Current estimates indicate that 65 percent of jobs will require a postsecondary degree or certificate by 2020 (Carnevale, Smith, & Strohl, 2013), and yet Latino students in the San Joaquin Valley do not fully access opportunities to enter college or the workforce prepared for success. Clearly there is a need for improved educational opportunities that increase Latino achievement and break the cycle of underachievement.

Early College High Schools: An Opportunity for Improvement

While many have articulated reasons for continued Latino underachievement, a lack of proper academic preparation is especially problematic. Many Latino students are left vulnerable and stuck in remedial gatekeeper courses when they first enter college (Young, Lakin, Courtney, & Martiniello, 2012). In his longitudinal study, Adelman (1999) found that the high school curriculum is one of the most important factors in determining successful completion of a bachelor's degree. For example, taking Advanced Placement (AP) courses is strongly correlated with completion of a bachelor's degree, more so than college access (Adelman, 1999). Perhaps even more important, a rigorous high school curriculum has a greater impact for Latino and African American students on their chances of completing a bachelor's degree. In *The Toolbox Revisited*, Adelman (2006) confirmed his original findings: "The academic intensity of the student's high school curriculum still counts more than anything else in pre-collegiate history in providing momentum toward completing a bachelor's degree" (p. xvii).

Although many barriers exist for all students to gain access to a quality curriculum, dual enrollment offers an opportunity for students to experience the academic intensity necessary for college completion. Originally considered an opportunity to propel advanced students more

quickly through high school, dual enrollment programs allow students to enroll in college classes and, generally, earn college credits while still in high school. It is the early exposure to college coupled with academic intensity while still in a supported high school environment that has expanded opportunities for many previously denied students (Hoffman, 2005). Many states have adopted policies that allow for dual enrollment agreements between secondary and postsecondary sectors (Andrews, 2004; Cowan & Goldhaber, 2015; Karp, Bailey, Hughes, & Fermin, 2005). These programs take a variety of forms, including simple dual/concurrent enrollment agreements, career technical education or career academies, and middle/early college high schools.

The Early College High School Initiative was initially developed in 2002 as an alternative to traditional education high schools. Similar to traditional dual/concurrent enrollment programs, these programs provide educational alternatives to help close the achievement gap. Early College High School (ECHS) programs are public schools located on or near college campuses, offering tuition-free programs that allow students to integrate high school and college curricula and complete them in a reduced amount of time. Such schools provide students with opportunities to earn college credit, complete general education requirements, earn an associate's degree, transfer college credit to a bachelor's degree, and/or attend career and vocational programs through community college systems.

In a study of 2,500 ECHS students, researchers found that participants were far more likely to graduate from high school, earn a college degree by high school graduation, earn substantial college credit in high school, enroll in college immediately after high school, and/or return to college for a second year (Berger, Turk-Bicakci, Garet, Knudson, & Hoshen, 2014). Other researchers have found that dual enrollment can have a positive impact on a variety of

measures, from shortened time-to-degree and higher college enrollment rates to improved grade point averages (GPAs) and completion rates (Andrews, 2004; Karp, 2007; Swanson, 2008). Is it possible that these programs could serve as a vehicle for improving Latino achievement and increasing the number of high school graduates who are able to pursue viable careers or postsecondary degrees? While examples of Early College High Schools populate the country, little research has been conducted about their direct impact on Latino students in rural communities.

With Latinos making up a larger and larger portion of the nation's current and future workforce, and data suggesting limited growth in their academic achievement, ECHS programs offer a way to close the achievement gap and support postsecondary matriculation. In order to clearly understand their potential impact on Latino student achievement, it is important to deeply examine and clearly describe the key support components of existing, successful ECHS programs. This study focused on two Early College High Schools in Central California and aimed to discover the specific support systems embedded within these programs that are helping to close the achievement gap for Latino students. To this end, I focused on the following questions:

- 1. What initially attracts students to enroll in an ECHS program?
- 2. What are the specific support systems within the school setting that motivate students to continue in an ECHS?
- 3. What benefits and challenges have students experienced in high school as part of an ECHS program?
- 4. What benefits and challenges do staff encounter while working at an ECHS program?

Overview of the Study

The purpose of this study was to explore social and educational factors contributing to the experiences of Latino high school students who were enrolled in ECHS programs in Central California during the 2015–2016 school year. Relying upon ethnographic principles and procedures, I learned as much as possible from the participants, both students and program staff, about their perceptions and lived experiences as they relate to Latino student achievement in an ECHS program (McMillan & Schumacher, 2009). Student stories provided the initial layer of data to answer the first three research questions. Staff interviews added to and enriched the students' perspectives while also answering the fourth research question. Site observations and document review served to substantiate many of the student and staff comments, and allowed me to weave the pieces together into a cohesive narrative.

The study incorporated three focus group discussions with 24 senior level students, 13 faculty and staff interviews, site observations, artifact collection, and a review of demographic data. Students were asked about their initial decision to enroll in an ECHS program, with follow-up questions pertaining to specific supports embedded within the program and the successes and challenges they experienced while enrolled. Program staff were asked to describe program elements, as well as the successes and challenges encountered within these unique environments. Through the focus group discussions and staff interviews, I was able to capture the details surrounding student experiences and create a rich description of student supports. Site observations and reviews of relevant artifacts and demographic data provided corroborating evidence to support the accounts provided by students and staff.

Significance of the Research

While literature on dual enrollment and ECHS programs exists, much of it focuses on student outcomes and data rather than the actual structures of these unique programs. In the course of program evaluation and even replication, it is important to understand each program component from the context of the potential impact on student achievement. With this in mind, the findings from this study will provide future programs with a better understanding of key characteristics that can improve Latino student achievement, leading to an increased rate of postsecondary persistence and reduced rates of regional unemployment. Ultimately, by illustrating evidence-supported practices, this study can influence the continued funding of these programs, shape future policy and practice, and support the development of similar programs in other communities, all while improving the career trajectories of future generations of Latino students.

CHAPTER 2:

LITERATURE REVIEW

Latinos make up a larger and larger portion of the nation's current and future workforce (U.S. Census Bureau, 2015) and yet, despite their growing presence in many school districts and states, their academic achievement continues to lag behind other groups (NCES, 2014). In this chapter I begin by examining factors that impact Latino academic achievement in U.S. compulsory education. I continue the literature review by exploring the origins and frameworks of ECHS programs. I conclude the chapter by discussing how this particular type of dual enrollment program may impact student achievement and by outlining the conceptual model that guides this study.

Latino Students in the U.S. Compulsory Educational System

The U.S. Latino student population has increased greatly during the past 30 years. In 1972, only 20 percent of K–12 students were reported to be non-white; African Americans accounted for about 15 percent of the school-age population, and Latinos were concentrated in the Southwest and in small groupings in the East. By 2005, the percentage of non-white students had increased to 42 percent, and the Latino population had increased to almost 20 percent (Gándara, 2009). The U.S. Census Bureau projects that by 2060, one of every three residents under the age of 18 will be Latino (Colby & Ortman, 2014). Clearly, Latino students make up an increasing portion of the school-aged population and American schools have been impacted by this growth.

Research shows that Latino students enter kindergarten far below their white peers in terms of school readiness skills. In a measure of six such skills, Latino children lagged behind non-Hispanic white and African American children in every skill, and they were significantly

less likely to be able to recognize letters, count to 20 or higher, or read written words in books (O'Donnell, 2008). In a study of data from the 1998 Early Childhood Longitudinal Study, Gándara (2010b) found that "only one-half as many Latino children as white children are in the highest quartile of math and reading skills at the beginning of kindergarten, and more than twice as many fall into the lowest quartile" (p. 24).

In the absence of effective interventions, deficits in school achievement in the early grades have a tendency to widen over time (Murphey, Guzman, & Torres, 2014). Comparing 2002-2003 English language arts scores from California's Standardized Testing and Reporting (STAR) system, researchers found a 34-point gap between Latinos and non-Hispanic whites in the fourth grade. Four years later, when comparing the same students now in eighth grade, the gap had increased to 36 points (Gándara, 2011). These demographic variables inform the present study and demonstrate that, because of the increasing Latino population's place in the greater American landscape, educational research—and research relating specifically to Latino academic achievement—is paramount. Latino educational achievement is a complex problem affected by many factors. In the following subsections, I examine only a few: linguistics, socioeconomics, and cultural and structural factors.

Linguistics: English as a Second Language

Language barriers present challenges for many Latino students (Gloria, Castellanos, & Orozco, 2005). With the increase in the Latino population, the number of Latino English language learners (ELLs) has substantially increased in the United States. In California, during the 2014–2015 academic year, 22.3 percent of enrolled students (1.4 million) were classified as ELLs. Of that group, almost 84 percent identified as Spanish speakers (California Department of Education, 2015). An additional 20 percent of California's 6.2 million students have been

reclassified as "Fluent-English Proficient," indicating that as many of 43 percent of students in 2014–2015 entered the education system as ELLs (California Department of Education, 2015).

Language barriers have the potential to significantly impact the academic achievement of Latino ELL students. Research to measure the impact and/or identify specific causation is widespread, typically focusing on quantitative data measures. For example, multivariable data were collected from three U.S. Department of Education databases to compare student achievement and ethnicity in the five states with the largest populations of students designated as ELLs: Arizona, California, Florida, New York, and Texas. Fry (2008) determined that students designated as ELL were not only the fastest growing student group in the United States, but were also the lowest-achieving student group in the areas of math and reading.

In terms of college readiness, archival data for the 2006–2007 and 2007–2008 school years was examined for Grade 11 students in the state of Texas. College-ready rates were determined for all students, as well as for only those designated as ELLs. Less than 50 percent of all students met college-readiness criteria in both reading and math (Moore et al., 2010). Performance of Grade 11 students designated as ELL was considerably lower, with less than 20 percent of graduating ELL students in Texas rated as college-ready.

One early study hypothesized that differences in achievement levels between students designated as ELL and students not designated as ELL were a result of linguistic complexity relative to subject matter, resulting in possible errors in test validity and reliability (Abedi, 2002). Four locations were selected across the United States: two large urban school districts and two entire states. At all four sites, Abedi revealed that students designated as ELLs scored lower on achievement tests than students not designated as ELLs; however, the achievement gap was not consistent across subject areas. Reading and writing were characterized as high language demand

assessments, whereas math, science, and math computation required less language demands (Abedi, 2002). Achievement gaps were smaller when language complexity was less demanding. Furthermore, achievement gaps were smaller in the lower grade levels than in higher grade levels. In sum, research tells us that linguistics is a critical factor impacting Latino academic achievement today. Whether a student enters the education system as a first generation student or a third generation student, exposure to English language plays a pivotal role in their future academic achievement.

Socioeconomic Status

Poverty is another factor negatively correlated with Latino academic achievement (Gándara, 2010). Overall, Latinos suffer from much higher poverty levels than do whites. Data from the U.S. Census Bureau's American Community Survey indicate that in 2012, the number of California's Latino youth (age 0–17) meeting federal poverty criteria was three times the number of white youth—31% compared to 11% (Annie E. Casey Foundation, 2015).

Additionally, regardless of English proficiency or legal residency, it has been documented that family income has by far the largest impact on high school completion (Lutz, 2007). One study addressing barriers to high school completion among Latinos found socioeconomic status (SES) was the primary contributing factor for Mexican-American students' lack of high school completion (Lutz, 2007).

Latino students come from homes where parental education is low or where parents lack English speaking skills more frequently than do students from other ethnic groups (Gándara, 2010). Almost 40 percent of California's Latino children live in families where neither of the parents has a high school diploma, compared with only 4 percent of white children (Annie E. Casey Foundation, 2015). Similarly, in the United States only about 15 percent of adults in

Latino households have earned a college degree or higher, compared with almost 41 percent of those in white households (Kena et al., 2015). Limited education and resources in the home do affect Latino education outcomes. Not only do Latino parents often lack necessary knowledge and skills to assist their children, they also lack experience in educational settings and may be unable to provide basic supports (Alexander, Entwisle, & Olsen, 1997).

Cultural Factors: Acculturation and Enculturation

Low educational achievement for Latino students may also be attributed to cultural differences between Latinos and the school system (Lopez, 2009). Cultural differences could be accounted for by a person's level of acculturation or enculturation, and the importance of their ethnic identity. Acculturation refers to "the multidimensional processes of adapting to the host majority culture" (Berry, 1980, p. 12). Within the acculturation process, an individual shifts behaviors, thoughts, beliefs, and attitudes of one culture to fit in with the norms of another culture. Enculturation, a related construct, "refers to maintaining aspects of one's culture of origin while living within another culture" (Gonzalez, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002, p. 48).

In a recent study, researchers examined acculturation and enculturation factors, parents' education levels, financial concerns, and gender as predictive of Latino high school students' decisions to attend college. The results indicated that Latinos who were more highly acculturated to white mainstream culture would be more likely to apply to college, while high enculturation levels did not predict applying to college (Castillo, Conoley, Cepeda, Ivy, & Archuleta, 2010). Lopez, Ehly, and Garcia-Vasquez (2002) also examined the effects of acculturation and social support on academic success and found that youth who were highly integrated had higher academic success, as measured by GPA.

For some, a strong ethnic identity provides an invisible protective coat. Extended families provide a sense of belonging and support that often acts as protection from stressful life experiences. Individuals may feel proud of their heritage and not be receptive to guidance and support from newly available support systems (Gonzalez et al., 2002). For students who are more enculturated, family support is critical in the decision making process. Including highly enculturated Latino students' families in developing plans and making decisions can have a positive impact on student confidence and outcomes (Ojeda, Flores, Meza, & Morales, 2011).

Structural Factors: Poorly Resourced and Unsupportive Schools

Latino students' high dropout rate and lack of persistence is related, at least in part, to their lack of attachment to school and a sense of not belonging. Fry and Lopez (2012) posited that Latino students' understanding of societal expectations, standards, and norms may stem from a lack of experience and exposure to mainstream U.S. culture concluding that students may who rarely come into contact with anyone who has gone to college or who intends to go, do not develop aspirations and knowledge about getting to college.

Today, California is the most segregated state in the nation for Latino students. The typical Latino student attends a school that is 84 percent non-white, which means that only one in six of their schoolmates is white (Orfield & Frankenberg, 2014). Additionally, it is in these schools with high percentages of non-white students that we see high poverty concentrations. In schools where the population of African Americans and Latinos exceeds 80 percent, over three quarters of them report at least 70 percent of their students living in poverty (Orfield & Frankenberg, 2014). High poverty, high minority schools are often the weakest in the system and illustrate a plethora of factors that limit academic achievement—less experienced and less qualified teachers, high teacher turnover, less challenging curricula, inadequate facilities, and

less successful peer groups (Orfield & Ee, 2014). Additional research has found that schools serving segregated, low-income students experience higher dropout rates, expulsion rates, and absenteeism (Rumberger & Palardy, 2005).

How schools are structured may greatly impact student achievement. Research indicates that students attending schools prepared to receive immigrant students have better performance outcomes. For example, support services such as mentoring, tutoring, afterschool programs, Spanish speaking staff, and ESL classes have been identified by Latino students as important to academic success (Behnke, Gonzalez, & Cox, 2010). While strong connections to teachers and counselors and access to college resources support academic achievement, they are often unavailable in poorly resourced schools. In a study of Latina high school students, for example, students with lower academic rankings indicated difficulty in making connections with staff and resources because of overcrowding and understaffed counseling departments. Students with high rankings, however, made connections with staff and used resources to support their efforts (Kimura-Walsh, Yamamura, Griffin, & Allen, 2009).

Additional studies illustrate the value of teachers in the support process. The practice of discussing things like college enrollment and high school graduation during and after class sessions was found to be beneficial for poorly resourced students (Castillo et al., 2010). In a study of undocumented Latino students, Gonzales (2010) found "that the tracking of students within their schools greatly influenced the relationships students were able to form with teachers and counselors" (p. 472). When students were able to open up to adults at school, they formed a trusted relationship and could openly discuss the stress of being undocumented.

Extracurricular activities offer an additional way for students to attach to school.

Activities like sports, band, newspaper, and other clubs offer an avenue for student engagement

(Fry & Lopez, 2012). Unfortunately, Latino students are often excluded from these activities because of family commitments or lack of transportation. Additionally, they may be reticent to participate in activities because of social awkwardness or exclusivity and lack of financial resources. Fry and Lopez (2012) found that by incorporating clubs, sports, and other activities into school routines and bring the benefits of these activities into the classroom, schools can effectively address this issue.

While there are countless factors that potentially impact Latino academic achievement, research supports the validity that linguistics, socioeconomic status, culture, and poorly resourced schools play critical roles in individual achievement. Taken in combination, these factors illustrate the complexity of the achievement gap impacting Latino students today.

Exploring Early College High School Programs

In seeking to increase Latino high school and college completion, there have been a variety of experiments with dual enrollment programs that allow high school students to take college-level courses for both high school and college credit. The early college movement came to life in 2002 with the support of the Bill & Melinda Gates Foundation. The Early College High School Initiative was designed to increase student engagement in high school and increase access to higher education. Early college programs enable disadvantaged high school students—especially first-generation college-going, low-income, and minority students—to take college-level courses while still in high school, and thus graduate with college credits and, in some cases, associate's degrees (Chmelynski, 2004; Kisker, 2006).

Currently, there are over 280 ECHS programs in 31 states serving 80,000+ students each year (Jobs for the Future, 2015). Implementation is currently concentrated in a handful of

states—New York, North Carolina, Georgia, Texas, Washington, Ohio and California. A map illustrating current locations around the country is provided below:



(Jobs for the Future, 2015)

Figure 1. Early College High School program concentrations

It is difficult to determine exactly what type of communities early college programs gravitate toward nationally, in California, twenty percent of the forty identified early college high school programs are located in rural communities, forty-two percent are located in suburban communities and thirty-two percent are located in urban communities (Jobs for the Future, 2015). The Early College High School Initiative's core principles dictate that these programs:

- are committed to serving students underrepresented in higher education;
- are created and sustained by a local education agency, a higher education institution, and the community, all of whom are jointly accountable for student success;
- develop an integrated academic program so that all students earn one to two years of transferable college credit leading to college completion;
- engage all students in a comprehensive support system that develops academic and social skills as well as behaviors and conditions necessary for college completion; and
- work with intermediaries to create conditions and advocate for supportive policies that advance the early college movement (Jobs for the Future, 2015).

By combining these core principles and the many characteristics of the geographic concentrations, this form of dual enrollment may be a potentially viable approach to improving rural California's Latino achievement gap.

Conventional thinking relies on remediation to prepare disadvantaged students for college, but the ECHS model prescribes meaningful challenge as the key to college readiness. Characterized as a "slingshot approach," early college pushes struggling students to do better and be more than traditional schools expect of them (Jacobson, 2005). The model focuses on providing students with rigorous, engaging instruction in a small scale, emotionally supportive learning environment (Fischetti, MacKain, & Smith, 2011; Ongaga, 2010). Research suggests that it is the power of this learning—personalized attention, high expectations, and strong academic support—that differentiates the early college model from other dual-enrollment programs that offer only access to college courses and credits (Berger, Adelman, & Cole, 2010).

Because each early high school program is designed to meet the needs of the students they support, no two programs are exactly the same but there are characteristics common to many. For example, students typically begin an early college program in the ninth grade. They spend the first two years, taking accelerated high school core curriculum along with a limited number of college classes. Often students' initial experiences with the college classes occur with fellow high school students and then gradually they shift to college classes with other college students. In some programs, students choose their own courses with only limited restrictions while in other programs, the scope and sequence is more narrowly prescribed. Students have access to all of the college resources afforded regular students, along with a high level of support resources within their high school program. The daily schedule is typically a block schedule

(ninety minute class periods) to accommodate college class seat time, with students moving freely between the high school and college campus.

While some may view dual-enrollment programs as elitist, providing enriched or accelerated opportunities to high-achieving students from advantaged backgrounds, early colleges actually seek to equalize opportunities, eliminating any perceived advantage. Early colleges focus on enrolling first-generation college students and students of color in order to create opportunities for those who have lacked access to higher education in the past. National data from early college evaluation studies reports that over half of early college students are the first in their families to graduate from college (Berger et al., 2014). Additionally, nearly 75 percent of early college students nationally are African American or Latino, and nearly 60 percent of ECHS students are eligible for free or reduced-price lunch. Such data provide evidence of the early college commitment to creating opportunities for students who are underrepresented in American higher education.

Early College Student Outcomes

Current research on early college programs indicates that student outcomes are positive (Jobs for the Future, 2015):

- 90 percent of early college students graduate from high school, compared to 78 percent nationally.
- 94 percent of early college students earn some college credit while in high school; early college students earn an average 38 college credits at no cost.
- 71 percent of early college graduates immediately enroll in college, compared with 68 percent of high school students nationally, and 54 percent of low-income students nationally.
- 30 percent of early college graduates earn an associate's degree or postsecondary certificate along with their high school diploma.

Evaluation data suggest that students in early colleges typically outperform students in traditional settings (Berger et al., 2010). In a study of four Early College High Schools in

western North Carolina, Hall (2013) found that the majority of students demonstrated proficiency on English and algebra tests at the end of their ninth grade year. Another study of a single early college in North Carolina found that students performed better than a matched group of traditional high school students on state tests of algebra, biology, English, and social studies (Kaniuka & Vickers, 2010). And in a study of another early college, juniors performed on par in their college classes with traditional college freshmen (Fischetti et al., 2011).

Finally, a decade-long study of the Early College High School Initiative by the American Institutes for Research found that early college students were more likely to graduate from high school than comparison students (86 percent versus 81 percent; Berger et al., 2014). Early college students also had higher English language arts assessment scores than comparison students, and 81 percent were enrolled in college two years out of high school, compared to 71 percent of non-early college students. Additionally, 21 percent of early college students earned college degrees, primarily associate's degrees, by the end of high school, while about 1 percent of comparison students did so during the same period of time.

ECHS programs expand the concept of dual enrollment, providing a vehicle for student engagement and access to higher education. Initial research supports the idea of this fast-tracked approach that combines smaller class sizes in a collaborative, supportive culture. Exactly how or if this model impacts Latino achievement is yet to be determined, making the focus of this study pertinent and impactful.

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¹ The study compared students who applied for admission to an early college, participated in a lottery, and were admitted to students who applied for admission, participated in a lottery, but were not admitted.

Early College High Schools and Latino Student Achievement

Having reviewed the fundamental areas of literature pertaining to this study—factors that impact Latino academic achievement and the origins and frameworks of ECHS programs—the final section of this chapter brings these issues together. Specifically, in the sections that remain, I hypothesize the connections between ECHS programs and Latino student achievement and propose a conceptual model to guide this study.

The variety of factors impacting Latino academic achievement—from language acquisition challenges and low socioeconomic status to broad structural and cultural barriers—and the role ECHS programs may play in alleviating their impact will require a far-reaching theoretical framework. For the current research, I used a framework made up of constructs from social cognitive career theory supported by the underlying concepts imbedded in dual enrollment. The next subsection provides more detail about this theoretical framework.

Social Cognitive Career Theory

Social cognitive career theory (SCCT) is a relatively new theory that is aimed at explaining the development of educational interest, choice making, and performance attainment (Lent, Brown, & Hackett, 1999). It is based on Albert Bandura's general social cognitive theory, which brings together both cognitive and motivational processes to study psychosocial functioning. Individual self-efficacy beliefs, outcome expectations, and goals serve as SCCT's basic building blocks (Bandura, 1999).

Self-efficacy refers to one's confidence in the ability to perform a given task and helps to determine whether a person will initiate, persevere and succeed at particular endeavors (Lent, Brown, & Hackett, 1994). Self-efficacy beliefs are dynamic or changeable, not at all similar to confidence or self-esteem. They derive from four primary sources: personal accomplishments,

vicarious experiences, social persuasion, and physiological or emotional states (Bandura, 1986). Provided individuals have the necessary skills and supports to accomplish something, SCCT posits they are more likely to become interested in, choose to pursue, and perform better when high degrees of self-efficacy exist.

Outcome expectations refer to beliefs about outcomes or the consequences of performing specific behaviors. According to SCCT, people's perceptions or expectations of a final outcome impact not just the activities they will perform but also the amount of effort they are willing to expend. For example, a student may think she could successfully earn a college degree, but if she perceives limited positive outcomes, her self-efficacy may not be able to sustain the effort (Lent et al., 1999).

The third variable prescribed by SCCT, personal goals, is defined as "one's intentions to attain a certain level of performance or engage in a particular activity" (Lent et al., 1999, p. 300). By setting goals, people help to guide and organize their own behavior and sustain it when inevitable setbacks occur and more immediate positive feedback is missing. SCCT links personal goals to both self-efficacy and outcome expectations. To illustrate, people tend to set goals that are consistent with their views of their capabilities (self-efficacy) and personal expectations. Conversely, success or failure in achieving personal goals often plays a critical role in altering or confirming self-efficacy beliefs and expected outcomes.

By linking these variables together to form a cohesive support system, Lent et al. (1999) posited that SCCT in an educational setting could highlight the following process:

- Acquisition of positive self-efficacy and outcome expectations;
- Development of academic and career interests;
- Formation of linkages between interests and career-related goals;
- Translation of goals into actions;
- Development of academic and work skills and remediation of performance-related problems; and

• Negotiation of social supports and barriers that affect the development of self and occupational beliefs and the pursuit of preferred academic/career options.

Key to this process is the idea that individuals (in this case, students) can have new and sometimes corrective learning experiences, and ultimately forge new directions in life. These learning experiences may be influenced by feedback from their environment or even filtered by positive and negative mindsets (Bandura, 1999). For example, Latino students may see the impact of their parents' lack of education on their career choices and lifestyles and want to achieve a higher level of education. Conversely, because Latino students may lack role models or may have been exposed to other negative learning experiences, they may internalize the message that Latinos typically do not go to college (Gonzalez, 2015).

Using the SCCT framework, it is important to consider that impactful learning may not increase or change a student's interest; rather, it is the opportunity to internalize that learning—to change one's self-beliefs—that allows for a potential shift in interest. A specific example of an impactful learning experience with a positive outcome may include working with a math tutor and correctly solving homework problems. Both may be viewed individually as impactful learning experiences, but it is the coordination of the two together that can encourage a student to internalize and develop "a higher sense of efficacy for those tasks and increased expectations of similar future outcomes" (Lent et al., 1999, p. 302).

At its foundation, SCCT embraces the concept that students are likely to form an enduring interest in education when they view themselves as competent at performing and when they expect education to produce valued outcomes. Conversely, educational interests are unlikely to develop when students doubt their competence and cannot see the positive outcomes.

Furthermore, SCCT posits that for personal goals to increase for students, their environments must expose them to the types of positive experiences that can increase self-efficacy and provide

positive outcome expectations. Personal goals are impeded from developing when individuals do not have the opportunity to form strong self-efficacy and envision positive outcomes.

Early College High Schools look to provide students with opportunities to make choices and enact behaviors while encouraging them—and, in fact, allowing them space—to internalize these behaviors. Using a wide range of cultural supports, ECHS programs can leverage the motivation a student may internalize from family members and impact self-efficacy, outcome expectations, and ultimately personal goals.

Dual Enrollment: "Trying On" the Role of College Student

Aside from the obvious academic benefits, dual enrollment is seen by some as a social intervention where secondary students learn about the norms and behaviors expected for college success. Dual enrollees benefit from early exposure and practice. They effectively "try on" the role of college student, becoming comfortable in a college environment while still in high school and then bringing those experiences with them as they matriculate to postsecondary settings (Mechur Karp, 2012). By learning what it is like to be college students, dual enrollment students often experience a shift in self-efficacy, viewing themselves as capable college-going students in a safe and supported environment. Generally, studies have found that earning college credits prior to high school graduation increases the likelihood of earning a college degree and reduces time to degree (Adelman, 2006; Swanson, 2008). More specifically, research has correlated dual enrollment participation with a range of positive high school and college outcomes, including high school and college GPAs, enrollment, attendance, persistence, and degree attainment (Jones, 2014; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007; Speroni, 2011a, 2011b; Young, Slate, Moore, & Barnes, 2014).

From a sociological viewpoint, by learning what it is like to be a college student, dual enrollment students learn new roles. Mechur Karp (2012) explained, "roles are the 'parts' that people play when they interact with others" (p. 23). Roles are the behaviors and attitudes that go along with a particular position, and any time a person takes on a new role, they need to learn how to enact it. Two skills may help with the transition to a new role—the ability to observe ("anticipatory socialization") and the ability to imitate ("role rehearsal"). Anticipatory socialization or observation helps individuals learn about the behaviors, attitudes, and values that go along with a particular role (Ebaugh, 1988; Mechur Karp, 2012). It can happen in many ways, from daydreaming about the new role to actually observing others who already embody it.

Unfortunately, it does not always provide an opportunity to practice a role as role rehearsal does (Mechur Karp, 2012). This second process occurs when someone has a chance to act temporarily in the new role; it is a form of learning by doing (Cowan & Goldhaber, 2015).

Effective dual enrollment programs provide an opportunity for both anticipatory socialization and role rehearsal. Dual enrollees learn all the aspects of the college role before they actually leave the comforts and supports of their high school program. While developing the technical skills needed to perform college-level work they also learn the role of college student—the habits, attitudes, and behaviors—and develop strategies to successfully play this role by seeing how other people react to their attempts.

Conclusion

Early College High School programs represent a unique reform initiative that has attempted to close the achievement gap for secondary students over the past fifteen years.

Following a review of key factors impacting Latino academic achievement in U.S. compulsory education, I shifted to an exploration of ECHS programs, arguing that they represent a possible

solution to persistent achievement gaps. I concluded with a hypothesis of the potential underlying connections between early college programs and Latino student achievement, and proposed a conceptual model that guided the present study. This information supports the study by describing the problem and related elements in detail and then overlaying information about a prescribed solution. Next, in Chapter 3, I present a theory of change that guided the study's data collection and analysis.

CHAPTER 3:

THEORY OF CHANGE

In order to track the support systems that represent an integral component of ECHS programs, I developed a theory of change. I used the methodology described in the Aspen Institute's *The Community Builder's Approach to Theory of Change* (Anderson, 2005) and the information provided by the Center for Theory of Change (2016). I began with the ECHS model which provided basic assumptions and *long-term goals*, and then worked backward relying on existing theories and findings from the literature to illustrate a *pathway of change*, visually depicting the *outcomes* necessary for the long-term goals to be accomplished.

The pathway of change hypothesizes links between outcomes and posits the paths that lead from beginning assumptions, through key outcomes, to long-term goals. Along the way, program *interventions* intended to facilitate these outcomes are defined and attributed to specific outcomes. These interventions represent the support systems identified in the literature as instrumental to student achievement across a variety of ECHS programs. Finally, basic assumptions or universally accepted ECHS tenets provide a starting point to the pathway.

A diagram of the resulting theory of change is represented in Figure 1. The top of the figure shows the long-term goal of increased enrollment and graduation from four-year postsecondary institutions. Fourteen different potential interventions are clustered below five outcomes, which are grouped into two phases. One phase reflects culminating programmatic/structural outcomes—increased high school graduation rates and college credit completion—and the other phase reflects student-focused/cultural outcomes manifested within the ECHS journey. The diagram visually links each intervention to at least one outcome (some

interventions support more than one outcome and appear more than once), illustrating direct relationships between interventions or supports and critical outcomes.

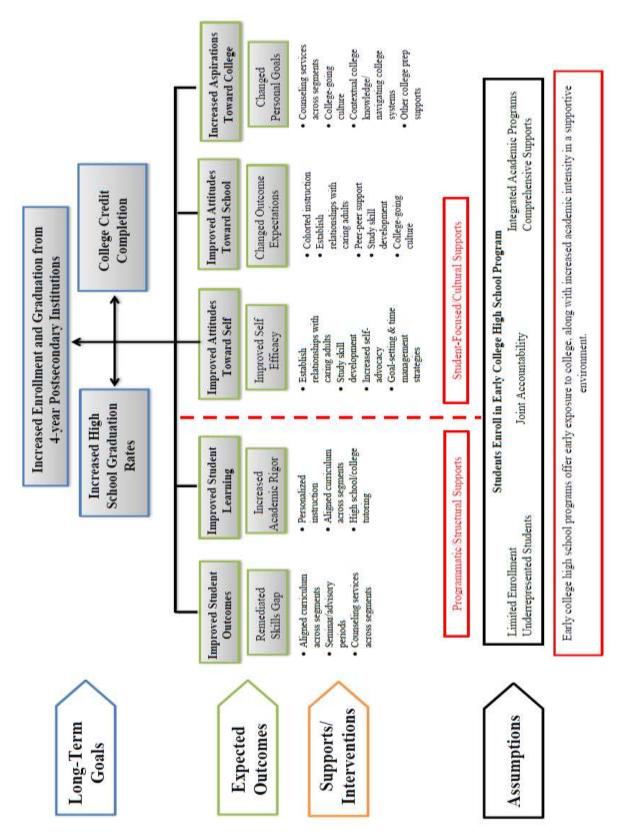


Figure 2. Theory of change for Early College High School programs.

Description of Interventions and Outcomes

The following descriptions of each of the outcomes and interventions in Figure 1 further support the theory of change. I have used bold font to identify outcomes, and italics to identify individual interventions.

- A. Improved student outcomes through remediation of skills: The literature suggests that students underrepresented in postsecondary institutions lag behind in academic skills (Murphey, Guzman, & Torres, 2014 & Gándara, 2011). Therefore, ECHS programs look to improve academic outcomes through remediation.
 - Aligned curriculum across segments: Students have a clear pathway linking secondary and postsecondary coursework; content is aligned and sequential.
 Common instructional practices bridge the segments. High school and college faculty may participate in joint professional development, with a particular focus on curricular alignment and college readiness skills.
 - Seminar/advisory periods assist students with skills such as math, literacy, and
 research skills: Specific courses within the comprehensive curriculum are
 designed to improve academic skills.
 - 3. Counseling services across segments (high school and college): High school counselors perform scheduling, credit checking, and record keeping duties; college counselors assist with preparation to move students into four-year institutions upon graduation.
- B. Improved student learning with increased academic rigor: A rigorous high school curriculum has a significant impact on bachelor's degree completion (Fischetti, MacKain, & Smith, 2011; Berger, Adelman, & Cole, 2010 & Ongaga, 2010). ECHS

programs improve student learning outcomes through higher levels of supported academic rigor.

- 4. Personalized instruction: ECHS programs determine the learning needs, interests, and aspirations of individual students, and then provide learning experiences customized for each student. This is illustrated through personal learning plans that describe students' academic, collegiate, and career goals.
- 5. *High school/college tutors with students:* Accessible, high quality tutoring services support both high school and college coursework.
- C. Improved attitudes toward self with changed self-efficacy: In addition to increased academic skills and rigor, research suggests that students must see themselves as college-going students (Mechur Karp, 2012). ECHS programs provide opportunities for student success in a safe and supported environment that fosters a change in self-image.
 - 6. Establish relationships with caring adults (one-on-one teacher-student or small group support): Programs provide stable, consistent adults who bolster students' self-esteem and serve as positive and mature role models. Adults may provide academic support, as well as become advocates for students who may not have experienced an adult's trust and willingness to go out on a limb for them.
 - 7. Study skill development: Students receive support that includes modeling and instruction about commonly used skills such as note taking, questioning techniques, organization, problem-solving strategies, Socratic seminars, research skills, peer-editing, and public speaking.

- 8. *Increased self-advocacy:* Students are taught to think and speak for themselves.

 This sends them the message that school is important, their futures are important, and, therefore, they are important.
- Goal-setting & time management strategies: ECHS programs create an
 environment that fosters the development of critical life skills like responsibility,
 discipline, and independence.

D. Improving attitudes toward school with changed outcome expectations:

Increasing academic achievement often requires a shift in student attitudes (Gonzalez, 2015). This shift can be facilitated by providing students with different expectations (Lent, Brown, & Hackett, 1999). ECHS programs showcase opportunities for student success, which foster a shift in student expectations.

- 10. Cohorted instruction: Students are scheduled as a cohort from one grade level to another. They share the same teachers for core classes, and have the same teacher advisors who monitor their academic progress.
- 11. Peer-to-peer support: Students are taught to support and push each other toward high academic achievement, encourage each other to come to school every day, stay in school, complete assignments and assigned projects, and persist in the face of academic challenges.
- 12. College-going culture: ECHS programs create an organization of high expectations targeted at a specific goal of postsecondary attainment.
- E. Increased aspirations about college with changed personal goals: ECHS programs encourage students to see the possibility of changing personal goals. Over time,

students shift their expectations and goals to include postsecondary success (Cowan & Goldhaber, 2015 & Mechur Karp, 2012).

- 13. Contextual college knowledge/navigating college systems: Programs provide knowledge about prerequisites, credits, and appointments. Students understand the consequences of withdrawal versus failure in a college class. Additionally, students and their families learn about the norms, systems, and vocabulary of postsecondary institutions.
- 14. Other college preparatory supports: Programs provide a full menu of additional supports that encourage college preparation including, but not limited to, financial aid information, placement test preparation, and college applications.

CHAPTER 4:

METHODS

Despite making up a large percentage of many school districts and states, Latino students continue to lag behind other groups in academic achievement (NCES, 2015). ECHS programs have been identified as a potential solution to this educational dilemma. Offering a comprehensive high school curriculum combined with postsecondary dual enrollment opportunities, these programs offer students an opportunity to experience college in a deeply supportive environment. This study examined the structural and cultural supports embedded in ECHS programs to better understand opportunities for impacting Latino achievement.

My investigation took place at two ECHS programs in Central California. I explored students' perceptions of their own experiences and also gathered input from staff about program structures. I used social cognitive career theory to frame the study, focusing on the cultural and structural supports frequently embedded in ECHS programs. To track these multi-layered and frequently connected supports, I created a theory of change model for ECHS programs to organize and illustrate the relationships between expected outcomes and interventions/supports. Through this model, I attempted to learn why students were initially attracted to their ECHS programs, and gain a better understanding of the supports within the school setting that motivated them to remain enrolled. In this chapter I describe the methods I used to conduct the research.

Overview of Research Design

I employed a qualitative research approach for this study, guided by ethnographic principles and procedures in order to provide a detailed, in-depth description of everyday life and practice (Merriam, 2009). By asking multiple people about specific processes and closely

examining the settings where processes occur, I was able to gain different interpretations and make fine distinctions about the structure and benefit of each program's support network (McMillan & Schumaker, 2010). To gather data, I relied on focus group discussions with senior level students, faculty and staff interviews, site observations, and document review.

Focus groups allowed me to ask specific but open-ended questions and provided the richest source of data. Students were allowed to openly answer prompts without being limited to specific responses as one would find in a survey instrument (Merriam, 2009). As such, they could share their experiences and personal goals while also exposing their level of self-efficacy and outcome expectations as they relate to postsecondary achievement. Using this qualitative approach provided students an opportunity to express their observations and feelings in their own words, while allowing me to gain insight into their experiences, perceived challenges, and sources of support (Schensul, LeCompte, Nastasi, & Borgatti, 1999).

Research Sites

My data collection focused on two Early College High School programs in Central California, which I refer to as Launch High School and Central High School (pseudonyms). The sites were selected based upon size, student demographics, and geographic location. I relied on sites that specifically reported significant Latino subgroups (Table 1) to address the lack of current research supporting this growing subgroup and to provide data to assist new and developing programs in creating effective student supports. In order to gain access to the sites, I submitted a study proposal to each school district's research unit for approval. I presented the study as an opportunity to increase existing research, influence policy and future funding, and provide critical data to newly developing programs.

Table 1

Early College High School Study Sites – Demographic Data (2014-2015)

	Student	12th	%		%
	Enrollment	Grade	Hispanic	% Socioeconomically	Graduation
ECHS	(#)	Cohort (#)	/Latino	Disadvantaged	Rate
Launch	409	98	54%	64%	100%
Central	256	58	57%	78%	100%

Source: California Department of Education (2015a & 2015g)

Launch High School

Launch is a specialized high school located on the campus of a northern Los Angeles

County community college, operating under the jurisdiction of the local high school district. It

was established in 2005 under the guidance of the California Community College Foundation.

The program provides a supportive, flexible, and academically enriched environment for

underrepresented average students who are high potential but low performing in the traditional
education system. Successful students receive both a high school diploma and an associate's

degree within four to five years.

Emphasizing math, science, and engineering, the high school prepares students for more advanced college courses and ultimately a successful future in a high tech industry. Because the program is located on a college campus, students are integrated into college life activities and may participate in campus clubs, college-wide activities, and/or fine and performing arts.

Participation in intercollegiate athletics is excluded. A robust college-going culture is nurtured campus-wide through the adoption of the Advancement Via Individual Determination (AVID) program. AVID is uses research-based strategies to develop critical thinking skills, while improving literacy and math skills for students. The program encourages supportive peer

relationships to improve students' hope for personal achievement. Parents are encouraged to participate. Students who meet one of the following criteria may apply:

- Current eighth grade student
- Low SES
- First generation college-going
- From a group that is underrepresented in postsecondary education
- Underperforming in the traditional setting but with the potential to be successful

Students are selected by random lottery once the family has completed an application, the student and parent or guardian have completed an interview, and the program has received the following information:

- A score of basic level or above on seventh grade California state assessments (language arts and math);
- Eighth grade report card with a baseline 2.0 GPA;
- Documentation of prior educational experience including attendance, discipline, etc.; and
- A recommendation from the middle school.

In the 2014–2015 academic year, 96 percent of 11th grade students at Launch met or exceeded standards on California's Smarter Balanced English language arts/literacy test, and 62 percent did so on the mathematics test (California Assessment of Student Performance and Progress [CAASPP], 2015). In the same year, 99 percent of all Grade 10 students scored proficient or advanced in English language arts, and 100 percent did so in mathematics on the California High School Exit Examination, or CAHSEE (California Department of Education, 2015c).

Central High School

Central is a four-year accelerated public high school in Central California that provides both a high school diploma and transferable college credits upon graduation. Beginning in 2005, it began as a collaborative effort between a community college and unified school district. The community college campus is adjacent to the high school campus. The school's mission is to

create a learning environment that supports a positive culture, high expectations, inquiry, and effort. Central blends cognitive challenges with caring connections that encourage self-discovery and maximize potential. The program emphasizes a non-traditional high school setting and small learning community in a personalized setting. During the first two years, students spend the majority of their time at the high school campus and take selected college courses. In the third and fourth years, students are enrolled almost exclusively in the community college, taking a full course load, earning up to 60 units of transferable college credit. As at Launch, organized sports are not offered.

Promotional materials clearly identify expectations for students and families. Students are expected to make education a priority, maintain excellent attendance, be responsible learners, devote time to schoolwork, and behave in a manner that exceeds expectations. Families are expected to provide an environment that supports education; provide a place for students to complete schoolwork; attend, participate in, and support school-related activities; and be involved in students' lives. The student selection process is by random lottery and students are required to be incoming freshmen and have completed Algebra 1 or higher to be considered.

In the 2014–2015 academic year, 86 percent of Central students met or exceeded standards on California's Smarter Balanced English language arts/literacy test, and 50 percent did so on the mathematics test (CAASPP, 2015). Additionally, in the same year, 100 percent of all Grade 10 students scored proficient or advanced in English language arts and mathematics on the CAHSEE (California Department of Education, 2015c).

Populations

Two different populations participated in this study. First, a total of 24 12th grade students across the two ECHS programs took part in three focus group discussions—two at

Launch and one at Central. The students' academic status varied in terms of cumulative grade point averages (GPAs), college credits earned, and anticipated postsecondary pathways. I sought to include Latino students who represented a variety of achievement levels. In order to provide a balanced perspective, it was important to gain insights from students performing at all academic levels. Site administrators selected the participants based upon ethnicity and academic achievement.

The second population participating in the study comprised staff members from the same ECHS programs. A total of 13 faculty, administrators, and support personnel across both sites participated in interviews. Eleven staff members were initially selected by site administrators based upon my request for a mixture of staff levels. At both sites, additional staff members expressed interest in participating once data collection had begun. These requests were enthusiastically granted.

To recruit both groups of participants, I provided site administrators with a series of recruitment literature and consent/permission forms. Student participants were separated by age. Those over the age of 18 received a recruitment letter (Appendix A) and a form through which they provided their consent to participate (Appendix B). Those under the age of 18 received a recruitment letter and consent form for their parents (Appendix C), as well as a student assent form (Appendix D). Executed documents were required prior to participating in each of the focus groups. Each staff participant received a recruitment email (Appendix E) from the site administrator and then completed the Consent to Participate (Appendix F) prior to the interview. Both students and staff were informed that their participation was voluntary and confidential. I provided each participant with a \$10 gift card at the conclusion of the focus group or interview as a token of appreciation.

Data Collections Methods

Focus Groups

I conducted a total of three in-person focus group discussions with students at the participating sites. The groups ranged from of six to nine participants. A total of 24 students participated – equally split between males and females. All of the students identified as Latino and 21 out of 24 (87.5%) were the first generation in their families to have attended college. At the time of our meetings, only one student out of 24 was still undecided about their postsecondary path. One student intends to continue at the community college, one student plans to attend a private university, one student will continue their education out-of-state, six students opted for one of the University of California (UC) campuses, and 14 students have selected a California State University (CSU) campus. Every student that participated in a group discussion successfully earned college credits while enrolled in high school, ranging from a low of 32 to a high of 63 with an average of 47.5 credits. All of the information was self-reported by each of the students. An overview of the participants in each group is provided in Tables 2, 3, and 4.

Table 2

Launch Student Focus Group Participant Demographics (Group 1)

		T		College	.
		First Generation		Credits	Postsecondary
Participant ID	Gender	College-Going	Ethnicity	Earned	Plans
Student 1	M	Yes	Latino	55	CSU
Student 2	M	Yes	Latino	58	CSU
Student 3	F	Yes	Latino	40	Community college
Student 4	F	Yes	Latino	63	UC
Student 5	F	Yes	Latino	61	UC/CSU
Student 6	F	Yes	Latino	54	Undecided

Table 3

Launch Student Focus Group Participant Demographics (Group 2)

		First Generation		College Credits	Postsecondary
Participant ID	Gender	College-Going	Ethnicity	Earned	Plans
Student 7	F	Yes	Latino	40	CSU
Student 8	F	Yes	Latino	45	CSU
Student 9	F	Yes	Latino	54	CSU
Student 10	M	Yes	Latino	62	Out of state
Student 11	M	Yes	Latino	58	UC
Student 12	M	Yes	Latino	52	Private
Student 13	M	Yes	Latino	44	CSU
Student 14	F	Yes	Latino	46	UC
Student 15	M	Yes	Latino	40	CSU

Table 4

Central Student Focus Group Participant Demographics

				College	
		First Generation		Credits	Postsecondary
Participant ID	Gender	College-Going	Ethnicity	Earned	Plans
Student 16	M	No	Latino	40	CSU
Student 17	M	No	Latino	45	CSU
Student 18	M	No	Latino	40	UC
Student 19	M	Yes	Latino	32	CSU
Student 20	F	Yes	Latino	35	CSU
Student 21	M	Yes	Latino	40	CSU
Student 22	F	Yes	Latino	45	UC
Student 23	F	Yes	Latino	32	CSU
Student 24	F	Yes	Latino	35	CSU

Each discussion was conducted at the school site during regular school hours. This served to reduce any barriers or anxiety around participation. During each discussion, I provided participants with an opportunity to reflect on their individual high school experiences and specifically asked them to identify the supports embedded in each of their programs. I also asked them to identify the challenges and successes they experienced within the programs. Discussion

protocols provided guidance and direction to the conversation (Appendix G). Participants responded freely to both open- and closed-ended questions, and they quickly adapted to the format with interactive and natural responses.

Interviews

A total of 13 staff interviews were conducted at the participating sites. As noted above, site administrators selected the initial 11 participating staff members, who represented a cross-section of faculty, administrators, and student support providers. Once interviews were underway at both sites, additional staff members came forward and asked to participate. These individuals increased the number of interviews from 11 to 13 and consisted of three males and ten females. All of the participants were veteran educators, averaging 21.3 years in the field, ranging from a low of ten years to a high of 35 years. Additionally, the group's average tenure was 8.08 years. Nine of the interviewees identified as faculty/teachers with two counselors and two administrators completing the group. Included in the faculty/teacher group at Central were three support faculty positions. These unique positions provide dedicated support to students enrolled in college classes. Students are required to attend classes with these faculty several times each week to review college course work and monitor progress. A description of participants from each site is provided in the Tables 5 and 6.

Table 5

Demographics of Launch Staff Interview Participants

Participant				Years in	Years at
ID	Site	Gender	Position	Education	ECHS
Faculty 1	Launch	F	Administrator	15	4
Faculty 2	Launch	F	Counselor	30	8
Faculty 3	Launch	F	Faculty	20	10
Faculty 4	Launch	F	Faculty	12	4
Faculty 5	Launch	F	Faculty	18	10
Faculty 6	Launch	F	Faculty	21	7

Table 6

Demographics of Central Staff Interview Participants

Participant				Years in	Years at
ID	Site	Gender	Position	Education	ECHS
Faculty 7	Central	M	Faculty/Counselor	33	12
Faculty 8	Central	F	Faculty	27	3
Faculty 9	Central	F	Faculty	12	7
Faculty 10	Central	F	Support Faculty	10	4
Faculty 11	Central	F	Support Faculty	16	12
Faculty 12	Central	M	Support Faculty	35	12
Faculty 13	Central	M	Administrator	28	12

Each interview was conducted at the school site within normal school hours using established interview protocols to guide the conversation (Appendix H). I provided each staff member with an opportunity to describe his or her role at the site and then asked about the ECHS model and the specific support systems the site had implemented. I provided participants with an opportunity to reflect on their experiences and asked about the successes and challenges they had experienced.

Supplemental Data

A series of site observations was coordinated throughout the data collection phase of this study. Each observation occurred within the normal school day. At each site, after checking in at the administrative office, I was given access to the campus. I intentionally scheduled observations on different days of the week and different times of the day. Because each observation encompassed the entire site, it proved difficult to use a standard observation protocol. As a substitute, I used a small notebook to record observations. The intent of each site visit was to observe interactions and behaviors and contextualize the data that had been gathered during focus group discussions and interviews.

The final collection of data generated for this study came from the review of a variety of relevant documents. I gathered general student demographic data from focus group participants using a student questionnaire (Appendix I). This tool allowed me to gain unique information about each student and offered participants an opportunity to disclose information that they were not comfortable sharing in the focus groups. While only a handful of students provided additional comments, the questionnaire allowed for a richer depiction of the student population.

I was also able to review a number of site-specific documents that served to illustrate items that had been discussed in staff interviews or student focus groups. Some of the most relevant items were: student enrollment applications, interview protocols, student schedules and individual learning plans, student handbooks, WASC reports, SARC reports, lesson plans and course syllabi, and a variety of student work. To complete the review of available data, I accessed a wide variety of public databases to gather student outcome data. This included the California Department of Education's reporting system, DataQuest, as well as reporting systems maintained by the California Community Colleges Chancellor's Office, and the CSU system.

Data Analysis

Focus group discussions and interviews were recorded with an iPhone, and then transcribed by an online service with student names redacted to maintain confidentiality. During both discussions and interviews, I took notes and recorded my observations. I read each transcript while listening to the audio file to ensure that there were no errors in the transcription. I also compared the transcripts with the notes I took during each discussion or interview and made corresponding notations on the transcripts.

To effectively analyze each transcript, I initially used the supports identified by the theory of change model and coded the transcripts according to those themes. During the coding

process, based upon student and staff responses, I identified a handful of additional themes that had not been previously considered. These were included with the pre-set themes. After the initial coding, I grouped themes by the outcomes they supported. It was during this phase of the analysis that significant supports and outcomes began to emerge. I developed a similar model for data collected during site observations and document review, and I then integrated these findings into the transcript data. The result is a much richer depiction of student experiences surrounding ECHS supports.

Ethical Considerations

This study did not present any significant ethical issues. I was, however, supremely cognizant that students and staff were sharing personal stories, beliefs, and perceptions. As a result, I was transparent throughout each step of the process, sharing my problem statement with site administrators and then explaining the intent and purpose of my study in recruitment information to participants. I allowed focus group participants and interviewees control of the recording equipment and access to transcripts of our dialogue so that they were assured that information was not falsified. Additionally, I scrupulously protected participant identities and confidentiality, and only included participants who provided signed consent forms. All audio and transcription files were saved on my computer with password protection. Once audio files were safely transcribed, I destroyed them to prevent future access.

Reliability and Validity

There were two factors that may have impacted the reliability and validity of my study.

The first factor involves how respondents reacted to me on the basis of my ethnicity and gender, not just my position as a researcher. I am not a Latina and yet I was soliciting personal information and feedback from a group of primarily Latino students. Research hints that this

factor could make participants (at least initially) reticent to share deeply personal feelings and experiences with me (Merriam, 2009), or conversely, might encourage them to try to phrase answers in ways that they think I wanted to hear (Maxwell, 2013).

Merriam (2009) offered, "The interviewer–respondent interaction is a complex phenomenon" (p. 109), but a non-judgmental and respectful attitude on the part of the interviewer may diminish the impact of possible biases. I made every effort to treat all the students who took part in the project equally and fairly, and I hope that my experiences as a teacher, administrator, and parent allowed me play the role of a sensitive and empathetic listener to the participants of this study. I also believe that a focus group setting, rather than one-on-one interviews, put students at ease.

The second factor involves participant truthfulness and accuracy. Because my study explored experiences in Early College High School programs, I am convinced that an ethnographic study provided the best format for gathering data. I believe that I was able to encourage accuracy by carefully facilitating the focus group discussions in such a way that they did not lead participants to specific responses. Collecting adult responses to many of the same prompts also allowed me to verify many of the students' recollections. Additionally, wherever relevant and possible, I used secondary data sources (observations or document review) to triangulate data and crosscheck findings.

Summary

The experiences of Latino students in ECHS programs continue to be understudied by educational researchers. This study allowed for ECHS students and staff to provide experiential data to identify the components within their programs that have transformed student achievement. Using a combination of student and adult responses, site observations, and

document review, I was able to weave together a rich depiction of these programs and add depth to the often-formulaic descriptions of supports and outcomes. Study findings will assist future generations of similar programs to expand and thrive.

CHAPTER 5:

FINDINGS

Early College High School programs have been identified as a potential way to increase postsecondary attainment for Latino students. Located on or near college campuses, they offer tuition-free programs that provide students with the opportunity to integrate high school and college curricula, and complete both in a reduced amount of time. Additionally, these schools are designed to provide a network of programmatic and student-centered supports to improve student learning and academic outcomes while building self-efficacy, changing outcome expectations, and refocusing personal goals. With all of this in mind, the purpose of the current study was to better understand which support components of ECHS programs have made a positive impact on Latino student achievement. Using the theory of change described in Chapter 3 as a framework, this chapter presents the findings that resulted from qualitative analysis of the focus group discussions, interviews, observations, and document review. The data posit that ECHS programs offer a wide variety of programmatic and student-centered supports to remediate academic skills gaps and increase academic rigor while improving student self-efficacy, changing students' expected outcomes, and aligning their personal goals.

The findings are organized into two sections: (a) the programmatic or structural supports aimed at establishing ECHS programs, while remediating academic skill deficits and increasing academic rigor, and (b) the student-centered or cultural supports created to improve student self-efficacy, change students' expected outcomes, and better align their personal goals. Findings from each of the four inquiry methods—discussions, interviews, observations, and document review—were initially analyzed separately. It was through the analysis process that the overarching spirit of collaboration manifested itself, and the presentation of the findings in a

consolidated fashion was deemed more appropriate. By presenting student and adult voices together, the data provide a deeper and richer depiction of the ECHS environment.

ECHS Structural Supports

The findings regarding structural supports imbedded into ECHS programs are organized into two themes (see Figure 3). First, I describe the critical core components of the program, including the qualities of the programmatic structures and the importance of student and teacher fit. I then describe the supports designed to remediate academic skills and increase academic rigor. These include specific classes and instructional approaches, as well as relevant policies.

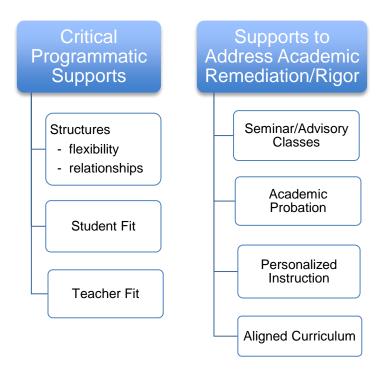


Figure 3. Major themes identifying programmatic and structural supports.

Finding 1: Critical Programmatic Supports

While initially not considered in the original theory of change model outlined in Chapter 3, critical programmatic components were revealed during the data collection phase of the study.

These speak to the value of overarching program structures and the importance of identifying the likely characteristics of both students and staff.

Structures

More than 240 ECHS programs operate nationwide, offering students who are traditionally underrepresented in postsecondary education the opportunity to pursue a high school diploma while simultaneously earning college credits. Early colleges are guided by the five core principles of the Early College High School Initiative – serving students underrepresented in higher education, developing integrated academic programs so students can earn transferable college credit, engaging students to develop the skills necessary for college completion, working collaboratively across the K-16 continuum, and advocating for supportive policies (Jobs for the Future, 2015). These principles provide structure and guidance to a growing network of early college programs, but the reality is that no two programs look exactly the same.

Flexibility and Adaptation

For faculty and administrators at the two sites participating in this study, flexibility and change were important keys to their success. One Central support faculty, explained, "Early college high schools are so new and they don't really have a set structure. And every school is different, depending on the district and location. It really depends, so we have to be flexible and capable of change." Every professional staff member who was interviewed spoke of the necessity to think beyond traditional structures and look for creative solutions to support students. It was this Central staff member's comment that provided the richest depiction: "We are different from other schools so we are not going to think as other schools think.... Everyone

is pulling in the same direction, and we all want the same thing. We want these kids to be successful."

A ready example of flexibility and nontraditional thinking is illustrated at the Central program, where mandatory support classes were restructured midway through the 2015–2016 academic year for all junior and senior level students. Responding to data that indicated students were in need of more structure and more consistent support, staff came together and reorganized this critical piece. Rather than one faculty member supporting a single group of 30 students throughout the semester with weekly check-ins and periodic seminars, staff reorganized to support students within a content area on a more frequent and regular basis. One Central faculty member explained:

We changed our jobs this semester, just to try and improve our program. I now support all of our juniors and seniors in their English classes....I'm looking at their papers, seeing them before they are submitted. I'm encouraging them to do peer review....We felt like we needed the kids here to give them more of a routine and a bit more consistency in their schedules.

Initial response to this change has been favorable with the students. In both focus group discussions at Central, students spoke of the increased level of support in positive ways. They acknowledged that while this new structure had impacted their freedom, they were better prepared and more confident in their college classes.

Cohesive and Collaborative Relationships

Two of the five core principles supporting early college programs call for joint accountability and integration between secondary and higher education partners (Jobs for the Future, 2015). Delving deeper into the basic structures at each site, the value of collaboration was shared among faculty, administrators, and students. At Launch, consistent leadership and

strong collaboration have facilitated a positive atmosphere. One Launch administrator shared the value of their cohesive relationship:

The college integration with our leadership teams and the partnership that we have with the college are crucial. There's no way we could have all of the supports in place without the partnerships that exist. That's really the success of everything.

Additionally, this administrator spoke of the consistency in leadership among the partners and described their efforts to institutionalize these critical relationships:

We say programs are really people driven. The three primary people that initiated this venture are still involved in the program in some capacity, and so now we are working to get systems in place to provide for consistency and continuity.

Further evidence of the supportive relationship at Launch is depicted by a well maintained and designated space within the college campus, consisting of a cluster of permanently attached modular classrooms. A clearly marked entrance provides security and limited access from the general population. Students move freely between the self-contained ECHS site and the larger college campus, but they still have their own space to socialize and hang out. This separate space also provides an area for message boards to promote early college activities like senior prom and summer enrichment programs, as well as an area for food services provided by the high school district.

Launch's site counselor further illustrated their close relationship with the college: "We work closely with the college liaison. We do college registration together and then when the registration list comes out, we go through it to make sure students are taking what they are supposed to be taking." Three of four faculty cited the relationship between the college and the district as key to the program's success, with one core Launch teacher offering, "Our community college and our high school district have been willing to make this work. That's a great part of our success."

At Central, a different relationship exists—one that from the outside depicts a collaborative partnership but from the inside, participants describe a different scenario. Despite the fact that Central's principal has been the lead architect of the program since day one, the faculty described their program as being "tolerated, rather than respected and supported." A lack of consistent leadership at the community college was highlighted as a significant challenge:

One of the things that you fight, at least we have always fought, is the idea that this school came from the community college. And yet all the people with the idea of this school were gone or changed their jobs within the first two years. The first memorandum of understanding [MOU] we had ran out after three or four years, and every year they have attempted to write a new one, and we still don't have one....It seems as if the two things that we have fought all the time is the respect of the college and the respect of our own district.

The absence of consistent and supportive leadership transcended throughout the organization, impeding some critical structural supports within the Central program. Students were not given priority registration; in fact, many times students were registering after everyone else had registered for class. This impacted their schedules, course selection, and overall alignment. In conversations with five different core teaching and support faculty, they expressed frustration with the existing system. One veteran Central teacher expressed a commonly viewed belief:

If you were going to start a new program, I would number one have that relationship with the college. They have to be on board 100%. They have to value these kids coming in....having the college say, "We want those kids here. Let's make sure that they get the classes they need in a timely manner." That is the missing component for us and yet we're still putting students in their program....It would be so perfect if the college would value the 200 students we send them and treat them as a specialized type of honor group.

Interestingly, this strained relationship at the higher level seemed to be invisible to the students. One Central student offered an entirely different perspective:

You have to make sure you have a strong relationship with the college because the relationship with this school and the college is good. If we need to add a class or

something, we go downstairs and they always take care of us, because they know who we are. They have a good relationship with each other.

This illustrates the impact of prolonged efforts made by Central's staff to develop relationships with administrative and operational staff at the community college—a necessary workaround to the lack of cohesion and support at the top.

Staff also spoke of a lack of respect at the district level. There was no clearer evidence of this than the lack of permanent facilities for Central. Located on the campus of another district high school, Central occupies a portion of a single story building at the rear of the campus. The recently renovated space consists of four dedicated classrooms and offices, two technology/research labs, and an open gathering space. The remaining space in the building is devoted to food services and a staff lounge, which are both shared with the other program. There is limited outdoor space for students to congregate and hang out. Signage is small, and the perimeter of campus is fenced, with access from the parking lot through a single gate. The community college campus is located within walking distance but not clearly visible from Central's site. Students and staff alike commiserated together: "This is another school's campus. We've never had a real school. Nothing. We've been in portables and on different sites." Despite complaints of inadequate space and a nomadic existence, students were observed during their lunch period and at the end of the day exhibiting typical high school behavior—a pick-up basketball game and small circles of students casually chatting or studying.

Student Fit

Being here and being with students and families that have been selected, it's a school of choice. We have them apply, we interview them, we're choosing these students and their families because we think they're going to be an asset to the environment. We think we'll benefit from it, and we truly believe they are someone that will benefit just greatly from the whole experience. - Launch faculty member

Students are clearly the focus of any education program, but in an ECHS environment, taking steps to ensure that such a unique program is a proper fit for each student is critical. Both programs in this study, Launch and Central, subscribe to the primary core principle of the Early College High School Initiative: serving students underrepresented in higher education. Both programs are components of much larger public school districts.

Central is part of a comprehensive K–12 district serving over 73,000 students, and Launch is part of a high school district serving over 24,000 students. Both programs reflect the demographics attributed to each district's overall student population. Additionally, both carry out organized recruitment activities each year, blanketing their communities with recruitment materials, visiting district middle schools, and hosting a series of open houses and other recruiting events. Both require an application and some level of student proficiency to determine eligibility, while neither program provides student transportation—all criteria for establishing a base level of engagement. At the end of the day, however, both programs seemed to lack the ability to definitively identify students possessing appropriate levels of motivation, determination, and commitment.

Admission requirements. Central requires only the successful completion of Algebra by the end of eighth grade, along with a very short application. Once student eligibility is determined, students are entered into a lottery. In all, 110 students entered the 2016–2017 lottery for 70 available spaces. Historically, about 10 percent of the ninth grade cohort has left the Central program after freshman year. Staff and administrators discussed the importance of perfecting student fit:

We lose more students because they realize what's going to be required here and they chose not to do it. If we could actually identify who the students are that have grit, I actually think those 70 spots would be better filled.

While Launch requires a much more comprehensive application process, their ninth grade retention rates have declined significantly in recent years. Using standardized test results as a solid predictor of academic achievement, administrators were left with a hole in their evaluation process when testing was suspended after 2012–2013. As a result, ninth grade retention dipped from upwards of 90 percent in 2012–2013 to close to 80 percent in 2014–2015. In response, Launch has revamped the entire student evaluation process to include a greater focus on an inperson interview. The process begins with an application completed by both the student and his or her family and basic criteria for selection: a baseline 2.00 GPA, a review of prior educational experience (attendance and discipline), and a recommendation from the middle school.

For the 2016–2017 academic year, Launch received 324 applications for 118 available spaces. Applications are reviewed by the teaching staff:

Every application gets two reads by the teachers. If it's a yes—yes, then we let them go ahead to the interview. If it, for some reason, is a yes—no, we have a third read by admin or counselor. If it's a no—no, we always do the same thing. Admin looks at it to see, is there something we overlooked? We want to make sure we give everyone the chance to have this opportunity, those that would really benefit from it. — Launch Administrator

Once applications are screened, students and families are asked to come in for an interview. A total of 220 students were selected for interviews for the 2016–2017 freshman class. These interviews provided insight into student motivation and served as a strategic exercise to measure student fit:

Our biggest goal when we're doing the interview [is], we really want to make sure that students are doing this on their own for the most part, and that they really see the value and the connection in education and career and beyond. – Launch Administrator

Student perspectives on fit. From a student perspective, the decision to attend either one of these programs comes with varying degrees of support and motivation. Of the 24 students who participated in the focus group discussions, most spoke of encouragement from their families.

With 21 identifying as first-generation college students, they recalled only a basic understanding of ECHS at the start. As one Launch student responded: "All I knew was that it was a good idea. This was going to help me and I was going to go for it." Another Launch student reflected, "When I was in middle school, I knew about Launch High School. Then when it came time to apply, I applied. My whole family wanted me to come here, so I really didn't have to convince anyone." Central students expressed similar views. Students were familiar with the school but did not fully understand the entire program. One Central student recalled,

I got a letter in the mail that said they wanted me to apply or at least consider it. My Dad looked at it and said, "That's a really good school." I applied but didn't get picked in the lottery. I got waitlisted. Then a week before school started, they called. By then, I had made up my mind that I didn't want to come here but my Dad's like "Well, they said come try it out for a week and if you don't like it, you can start at the other high school." I came here and just fell in love with the place. I didn't want to leave after that.

Only a handful of students indicated resistance to the program from family and/or friends. One Central student revealed that her friends were not supportive: "They were like, 'you're a loser, don't go to Central. We can't hang out and go to dances together. Our friendship will die here." When asked if any had regrets after four years, the response was a collective and definitive, "No!" One student's reflection was perhaps the most poignant in terms of making the choice to attend Central:

For me, I grew up in a town where people don't make it. You don't leave the town. It's a small town but they don't leave. You just don't go anywhere in life. One of my brothers dropped out of high school. I saw the struggles he had. I saw the contrast for my other brother who ended up getting his master's in electrical engineering and working. I saw the contrast in that and seeing some of my friends die when they joined gangs. I just said, "There's got to be something better." College is the way out. It might be hard once you're out to get a job, but it's a lot better overall picture than just staying in one place and not even knowing what you're going to do the next day.

This student commuted 30 minutes each day to Central. He is the youngest of four children. Both of his parents attended college in Mexico. He estimates he will graduate from

Central with about 40 college credits, and he hopes to study nursing at the local state university and become a registered nurse.

Teacher Fit

Every teacher here, they're accountable to themselves....I would say that everyone who's working here has a drive, and that also makes it better because we're all driven. We drive the students. The students are driven. Our principal's driven. We're all going to the same direction. - Central faculty member

Data obtained in this study suggest that just as important as ensuring proper student fit is ensuring proper teacher fit. Well-qualified and motivated faculty and staff are critical components of thriving ECHS programs, as evidenced by interviews and observations. The staff at both Central and Launch exhibited similar characteristics—a strong work ethic, high levels of personal accountability, and a culture of unwavering commitment.

Launch had a staff of 19, supporting slightly more than 400 students, while Central had a staff of 14 who supported slightly more than 250 students. The staff at both sites were stable and experienced, averaging 20-plus years in education overall. Teacher turnover was almost non-existent; positions were rarely open and generally were the result of a retirement. Only experienced teachers with at least five years in the classroom were considered for open positions. Of the 13 faculty and staff who were interviewed for this study, seven had been with their program since inception.

Faculty identified a culture of high expectations for both students and themselves; a culture that was established from the very beginning of each program and fostered by site leadership, as illustrated by this comment from a veteran Central staff member:

Our principal would say what he wanted and then he would basically get out of the way so you could do anything you wanted in your classroom. And that's what keeps me here. He lets us work. He's got confidence and he says, "I need you to do this." Then we do it.

While staff universally admitted to hard work and the expectation that they would "wear many hats," they seemed to value more the opportunity to creatively problem solve while making a difference for students. This is illustrated by the following comment from a Launch faculty member:

What have been built in from the very beginning were expectations, and we continue to hold each other to those expectations. There may be an underlying pressure among the faculty to advise a club or provide afterschool tutoring. I think we actually like these kids and we want to support them and they are fun to work with. They show up every day and we are not emotionally beat down at the end of the day.

Staff at both sites spoke of ways to continually strive to improve their programs in spite of their previous successes. Their unwavering commitment to exceptional student outcomes was evident in their classrooms, their relationships with each other, and their relationships with the students. There was an overarching sense of personal responsibility to every student and a need to provide a program that could reach them all. One member of the Launch faculty shared the following observation:

What's unique about this faculty is even though we have performed fairly well, that we always look at the bottom and say, "How can we do better?" Here it's on you—you will get what you have done and you figure out how to make it better because it says right here and you feel it....How can we do better?

She described what district personnel or outside evaluators frequently pointed out: "You guys are always focusing on that little 10% that you didn't reach...90% of students scored advanced or proficient." And her standard response was, "But 100 didn't." She then explained, reflecting on the underlying culture of this unique program, "I don't know what makes us work like that. I don't think we've ever gone, 'alright, a 90!' We just say, 'What happened to the 10? Where are the 10? Do you know who they are? What happened?" Faculty at both sites shared similar reflections, signifying their overwhelming commitment to student success.

Finding 2: Built-In Academic Remediation and Rigor

We don't offer any remediation, and we only offer honors English freshman year, and we only offer honors biology freshman year. Do we get kids who are working at honors level when they first come in? No. But we build up those skills....[I]t's scaffolding within our classrooms. — Launch counselor

Conventional thinking relies on remediation to prepare students for college; however, the early college model prescribes meaningful challenge as the key to college readiness. Thus, despite the fact that both programs in this study require only minimal academic proficiencies, neither one offers targeted forms of academic remediation, choosing instead to build skills within rigorous core classes. Research suggests that it is the power of rigorous, engaging instruction in a supportive learning environment that differentiates early college programs and provides for increased student achievement (Fischetti, MacKain, & Smith, 2011; Ongaga, 2010 & Jacobson, 2005). One Launch faculty member offered, "We have skill levels of varying degrees. I think our basic skill level is probably a little bit better than the normal cut of kids that are in traditional high school, but they still need to work to make it in this environment."

At Central, students complete the entire ninth grade English curriculum in the first semester, followed by the entire 10th grade curriculum in the second semester. By the time they finish their sophomore year, they have completed three years of high school English. At Launch, students enroll in ninth grade honors English from the start and continue with that honors sequence through the 11th grade. There are no options; rather, it is something akin to a "sink or swim" approach and, for the most part, students respond.

As a Launch faculty member revealed, "Students work hard. The culture of the school forces them to step up their game." In the classroom, the teacher is expected to differentiate instruction to meet the needs of students who need the extra help. Additionally, both groups of faculty reported using a wide variety of research-based scaffolding techniques to build academic

skills, especially at the freshman level. Classroom observations showcased examples of a wide variety of supported instruction, from small group learning and interactive notebooks to learning centers, tiered assignments, and choice activities.

Measures of student achievement exceed district levels at both sites, with students consistently achieving learning proficiency at higher levels than district averages on state achievement assessments and the CAHSEE. A recap of student achievement measures appears in Table 7.

Table 7
Student Achievement Measures – Schoolwide Outcomes

	Launch		Central	
	School	District	School	District
2014–2015 California Smarter Balanced Exam				
% meeting/exceeding standards on ELA	96%	46%	86%	41%
% meeting/exceeding standards on math	62%	15%	50%	15%
2015 California High School Exit Exam				
% scoring proficient or advanced on ELA	99%	75%	100%	75%
% scoring proficient or advanced on math	100%	78%	100%	75%

Source: CAASPP (2015); California Department of Education (2015c)

Similarly, data suggests that Latino student achievement at both sites not only mirror each site's total population but also exceed achievement levels for Latino students districtwide. A recap of Latino student achievement measures appears in Table 8.

Table 8

Student Achievement Measures – Latino Outcomes

	Latino Population			
	Launch		Central	
	School	District	School	District
2014–2015 California Smarter Balanced Exam % meeting/exceeding standards on ELA	0.454	4.45	0.7.1	•
% meeting/exceeding standards on math	94% 68%	44% 13%	85% 47%	38% 11%
2015 California High School Exit Exam				
% scoring proficient or advanced on ELA % scoring proficient or advanced on math	100% 100%	80% 76%	100% 100%	73% 73%

Source: CAASPP (2015); California Department of Education (2015c)

While specifically identified remediation supports were not visible components of students' academic schedules, both sites rely heavily of academic support or advisory classes, academic probation, personalized instruction, and aligned curriculum to increase academic rigor throughout their programs. I discuss these programmatic aspects in the following subsections.

Academic Support/Advisory Classes

With faculty and staff addressing academic skill deficits within core classes, an additional support is provided to all students within both programs in the form of specific advisory or support classes. Launch has embraced the AVID curriculum across the full spectrum of their program, from ninth to 12th grade. They identify as a school-wide AVID site, developing students' critical thinking skills while improving literacy and math skills and building study and behavioral skills within an AVID support class. Every Launch student, regardless of grade level, incorporates this critical class into their schedule – every semester. While students candidly shared their dislike for particular AVID components, they also recognized the impact these courses had on their success,

I remember freshman year, dreading going to my AVID class. I didn't understand tutorials or Socratic seminars but now, it's one of my favorite classes. I get so much out of it....it helps me prepare for other classes, get extra help with papers and assignments, and just really keeps me on track.

Time and again, faculty and staff at Launch pointed to AVID as the catalyst for developing student skills while creating a culture of college readiness across the campus. "AVID here is our support for college, so it's our support for everything," explained one staff member. Each core teacher has been trained in AVID strategies and incorporates them into core instruction while also teaching a period of AVID support along with their core subjects. Within each classroom, evidence of the key academic strategies—writing to learn, inquiry, collaboration, organizational skills, and critical reading (WICOR)—was observed. Another Launch faculty member added that AVID "plays a huge part into everything, and really we want all of the WICOR aspects of AVID to flow through everything." Classroom observations validated this point; AVID strategies were incorporated into a wide cross-section of core classes, from honors English to biology and even Algebra II.

Central is not specifically labeled as an AVID school, but a similar student support system is in place. Support is imbedded within every freshman and sophomore course where the focus is on building academic skills, with an additional period focused on general academic support. Four different core teachers are also identified as support teachers (math, English, science, and social science) to assist with remediation and targeted support. In their junior and senior years, students are typically considered full-time college students. Central faculty recently implemented a mandatory support class for this student population. One faculty member explained the underlying philosophy: "When students are better supported, it gives them a sense of normality, consistency on where they go. It really leaves no room for excuses." Within

support classes, students have a sense of greater accountability but also recognize the benefit.

Central students openly shared some of their feelings,

It was a pain having to change our schedules and come back to campus more often, especially when we had spent our whole junior year without advisory. But once I saw how much better I was doing in my (college) classes, I realized that I needed the extra help to do better.

Students are shown how to search for the resources they need to succeed in their classes and, in time, they become comfortable seeking them out on their own:

When they become full-time college students, they often need support between high school and going into the adult world and trying to learn how to maneuver. We support them—looking at their papers before they are submitted, encouraging them to do peer review, or go to the tutorial center. Help them to find resources to do their work. – Central faculty member

Academic support and advisory classes provide a vehicle for developing academic skills in a supportive environment outside the core classroom. Faculty and staff at both sites spoke at length about the importance of meeting every student's needs. For example, as the Launch counselor put it, "We've got it set up now so that very few kids fall through the cracks. I think we've got it set up so that we can get those kids extra help." These additional classes offer a critical structural support.

Academic Probation

Another structural support identified at both sites is a robust academic probation system. Staff in both programs use data and grade reports to identify students in need of additional support in a timely and efficient way. At Central, one support teacher revealed his system:

I've got 12-week progress reports coming in today and tomorrow, and I'm looking down, and I'm already creating a list of the kids that will be added to the tutorial list, and then the kids that may be able to be taken off the list.

These tutorial sessions were provided after the regular school day for freshman and sophomore level students. I observed one such session, where students were engaged, quietly

working individually or in small groups with responsive teachers offering support. Faculty disclosed that the number of students participating in tutorial sessions fluctuated throughout each grading period, but they consistently saw 12–15 students in each of the two sessions offered, Monday through Thursday. This equated to about 20 percent of the students in the current freshman and sophomore classes at Central.

Launch requires all students to maintain a 2.5 GPA in high school and a 2.0 GPA in college. If students fall below these levels, they are placed in the academic probation program. Launch's counselor described their program:

We provide an academic probation program for freshman and sophomore students, meeting three hours each week. They spend time studying and doing their work and often working with a partner or small group. Sometimes a student hears something in class differently than another student; I tell them to put their heads together and figure it out. This is one of the ways we get students to learn to support one another.

She further explained that as many as 20 students might participate in academic probation each week, but the number fluctuates depending upon the time of year. "We are packed with freshmen each fall, but by spring semester, most of them have figured out how things work and the numbers decrease."

While faculty and administrators are unable to access students' college grades, both sites had developed systems to provide necessary support. One of Central's support faculty members explained, "If they are doing poorly here, it gives us an indication that they are doing poorly at college. Then it's a matter of inviting those kids and their parents to meet and talk about all their classes together."

Personalized Instruction

In its broadest context, personalized instruction is intended to support the academic success of each student by determining their individual learning needs, interests, and aspirations,

and then providing tailored learning experiences. In an ECHS program, personalized instruction may encompass personal learning plans that map students' secondary, postsecondary, and career goals. Evidence obtained at both sites supports a culture and practice of personalized instruction. Students were quick to attribute this individualized attention to some of their success:

I just feel that being closer to the teachers helps everyone overall. They're able to guide you much more so....Knowing that this kid is going to act this way, and this kid is going to learn it that way—they are better equipped to work with each one of us.- Launch student

Students also described environments that provided opportunities to reach out for added support. One Launch student explained, "There are always people here helping me, guiding me through it." Another Central student offered the following example to illustrate his experiences:

I think our freshman and sophomore year it was really big, a lot of the teachers stayed after school. So whenever we didn't have anywhere to go, which was very often, we would go in their class and just hang out. I guess over time we got closer to them. You get to know them on a personal level.

Within the first few weeks of their freshman year, both programs have students develop personalized learning plans to support their high school graduation, community college pathways, undergraduate goals, and career expectations. These plans are reviewed and modified throughout each student's four years in the program, and they provide a clear map of their journeys. Launch's counselor described the process:

They begin in their freshman year with a plan—what classes they will take and how they are going to fit into what they need in order to get an AA degree, if that is their goal. But really it's about how they are going to graduate from high school, and does it fit into the four-year plan to get to the college they want to go to and the career they want to have.

While much of this work happens in the AVID or advisory classes, students' plans are incorporated across the curriculum, providing hands-on examples that are used in core classes. Both faculty and students were quick to produce plans during this study to illustrate schedules, college courses, and long-term plans. It was evident at both sites that these plans are living

documents that map student progress and provide evidence of how much has been accomplished. Each plan reviewed provided a rich landscape of a student's journey and an excellent example of personalized instruction.

Alignment Across Segments

Aligned curriculum can provide a clear pathway between high school and college course content and may also incorporate instructional practices that link the two settings. In the current study, I did not find any evidence of specific and targeted alignment. Staff at Central cited relationship issues at the organizational level and staff at Launch said they shied away from structured alignment so as not to "water down" the college experience. There was, however, evidence of alignment happening with individual faculty members. One Launch teacher explained:

I have access to all the books used at the college and then incorporate them into my class. I look at their syllabus to see what is expected and then require twice as much so that, rather than holding students accountable to the community college standard, it is more equivalent to what they might get at UCLA or Berkeley.

Additionally, teachers in other content areas spoke of ways that they individually worked to align curriculum and support students as they transitioned to the college classes:

When I first got here, I looked at the outlines and the syllabi for most of the English 1 classes, and then I looked at my curriculum and tried to fit it in to make it so that my class would be a natural lead-in. I think it is happening, because my juniors have a 94 percent pass rate in that class. — Central faculty member

All of the faculty interviewed for this study reported working with students in specific content areas to review course syllabi and to backward map the semester, helping to eliminate the possibility of students becoming overwhelmed.

Some faculty spoke of the challenges that come from frequent staff turnover at the community college sites; others indicated difficulties in aligning schedules so as to foster

conversation. "One-on-one, the college faculty are amazing. They will work with you individually but not as a group. They are very busy, just like we are very busy. So there is no time to meet," admitted one Central teacher. In sum, while there was no evidence of intentional curriculum alignment between the secondary and postsecondary institutions, many faculty members were making individual efforts to align their core curriculum with that of the college partners.

ECHS Student-Focused/Cultural Supports

The findings regarding cultural supports imbedded into ECHS programs are organized into two themes: those designed to help students acquire positive self-efficacy and change outcome expectations, and those designed to facilitate the negotiation of other barriers. Within each of these broader themes, several sub-categories were evident (Figure 4). I discuss each in turn.

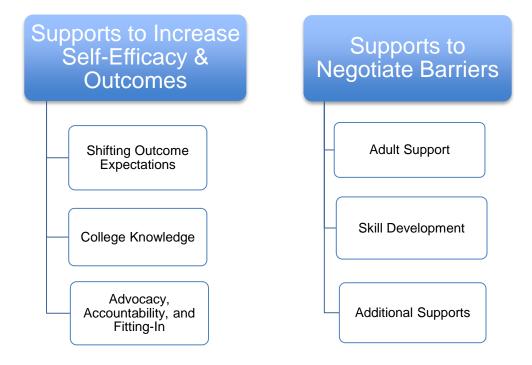


Figure 4. Major themes identifying cultural supports.

Finding 3: Self-Efficacy and Outcome Expectations

The theoretical framework supporting this study, social cognitive career theory, posits that for students' personal goals to increase, they must be exposed to the types of positive experiences that can increase self-efficacy and provide positive outcome expectations. Through the development of an integrated dual enrollment program, the Early College High School Initiative exposes students to positive college experiences, shifting both their self-efficacy and outcome expectations.

Shifting Outcome Expectations through a Culture of Success and Possibilities

We tell them from the get go, "If you get into college, its because of what you have done. Not what I have done. We will help you along the way but you are going to have to rally up and get this done. If you don't get into school, it's not because of what I have done or haven't done, or what your mom or dad haven't done. It's what you haven't done."-Launch counselor

Data collected throughout this study depict a culture deeply imbedded with high expectations—one that encourages success through personal accountability in a quiet and supportive way. Classrooms, offices, and public spaces highlight postsecondary pathways and motivational messages much like you would find in traditional, comprehensive high schools. But at these two unique campuses, the messages are supported and embraced by a team of dedicated adults. It is the authenticity of the team's support, coupled with each program's high expectations, that seems to foster the universal culture of college-going success.

Faculty and staff at both sites described an environment that offers support and guides instruction but that also requires personal accountability. For example, one Launch faculty member explained:

We start off from an early point in their journey with us planting the seed. We really try and send the same message throughout every class that they go to, every program that we implement: "We are here to support, guide and encourage you. We believe in you. You can achieve whatever you want, but the ball is ultimately in your court."

They described students who very early in the program communicate a desire to do better and who often ask for help. They acknowledged that while they seem to be ensconced in very success-oriented communities, there is not an overwhelming sense of intense pressure. Rather, "It's as if a tide is simply moving you in a successful direction." Additionally, because the majority of students begin these programs in the ninth grade, at the start of their high school journey, the shift in expectations occurs almost seamlessly. One Launch faculty member offered:

They fall into our school culture. From the moment we get them, we tell them, "This is how it is going to be. This is how you need to be and our culture is that we have a lot of very high expectations. It has nothing to do with how smart you are—this is about motivation and what you want."

Just as it appears that students seamlessly transition into a culture of changed outcomes, faculty members spoke of their institutional culture almost matter-of-factly. A Launch administrator explained:

We don't do anything special for them. We just hold them accountable and they rally up. We don't distinguish between anyone—male or female, Hispanic or white—it doesn't matter. We treat you the same: This is the bar we set, let's get there.

The concept of improved outcome expectations resonated with students almost as frequently as it did with faculty. Students in every focus group spoke about an environment that encouraged them to succeed. One Central student shared, "You are surrounded by other kids that want to do great and want to go on to college. It makes you want to keep up with them." Another Launch student provided an excellent example of the institutional expectations that permeated both sites:

You're in a culture where everybody does their homework. Well, pretty much everybody does their homework, and if someone doesn't, its like, "You didn't do your homework?" Nobody looks at them and says, "You're cool. You didn't do your homework." It's usually like, "You're an idiot. Why didn't you do your homework?"

Because the students served by the two ECHS programs in this study have traditionally been underrepresented in higher education settings, shifting their outcome expectations is a critical component. Data collected at both sites indicate that outcome expectations are changed early on through a culture of high expectations and personal accountability.

Building College Knowledge through Experience

When you go to college and you're among all those people, you get a sense of how to act when you take your first few classes over there. You might still be of a certain mindset, but by the time you are taking only classes at the college, you have a very good understanding of how to act. You become a college student and they ease you into that. First you have no classes over there, and then you have one, and then you have two, and then it's your entire day. — Central student

Embedded within the ECHS philosophy is the concept of dual enrollment as a type of social intervention. Students benefit from early exposure and practice by effectively "trying-on" the role of college student in a supported environment while they are still in high school.

Research shows that not only does this practice allow students to become more comfortable in this unfamiliar environment but it also allows for a student's self-efficacy to shift (Mechur Karp, 2012). By increasing a student's confidence in his or her ability to succeed in a postsecondary environment, we increase the likelihood that they will initiate, persevere, and succeed as they matriculate from the secondary world. Evidence of the effectiveness of this intervention was provided throughout my conversations with both students and faculty. Additionally, program success can be measured by the college credits that students proudly reported throughout each focus group. On average, students participating in this study earned 51.5 college credits while enrolled at Launch and 39 college credits while enrolled in Central.

Students recounted over and over the benefits they received from attending college classes. And while they freely acknowledged the value of earning college credits, it was the exposure to the college system and firsthand experiences they gained in the classroom that made

the greatest impact. "I never fully understood what college was. Coming here and being able to go and see what it was like, how the professors are, how exactly things get done—it was really useful knowledge," reflected one Central student.

Self-sufficiency in college coursework. Both Launch and Central subscribe to a similar postsecondary pathway. Ninth graders are introduced to a set curriculum of foundational level classes: Library Research, Micro Computers, Health Education, or Strategies for College Success. They are supported in these initial attempts by high school faculty. They typically attend one college class each semester with a group of fellow high school students. As students became more comfortable, more college classes are added to their schedules, but with smaller numbers of their contemporaries. As one Central student described it:

When we had just one college class, it was basically all of us in one college class, walking in a herd over there. That was our first sneak peek, you know? We just slowly started transitioning. Freshman year, one class, then sophomore year, you take two classes each semester along with your high school classes. Then your junior and senior year, it's just all your classes are over there.

In addition to providing the classroom experience, these ECHS programs provide opportunities for students to become familiar with the systems and cultures of a postsecondary environment. One Launch student explained the importance of learning how to access supports in an unfamiliar environment:

There will be classes where you'll be the only Launch student. If you are the only one, you can't study with other Launch students in support class, so I have to either make friends or speak with the professor in his office hours.

Launch students are also responsible for registering themselves for college classes, completing their initial Student Education Plans with a college counselor in their freshman year, and then updating it annually. Initially students are given a small list of courses to select from in their freshman and sophomore years, but then in their junior and senior years, the student

handbook instructs them to select courses that are first and foremost academic and also meet the requirements of their Student Education Plans. As one Launch staff member explained it, "Students feel better prepared. They are not new to the registration process, they know what its like to talk with instructors, they know where they need to go to see a counselor."

Preparation for transfer. Students are reminded to look for courses in the fall within the Intersegmental General Education Transfer Curriculum (IGETC), which satisfies the lower division general education requirements for transfer to the CSU system and some colleges and majors at UC campuses. This keeps students on a focused pathway, reinforcing the concept of making purposeful choices, and familiarizing them with systems at four-year institutions. The Launch Student Handbook also details the consequences of not successfully completing a course:

If you receive a D or F in a college course, every attempt must be made to retake the course the following semester (or summer school, if applicable). Students will be responsible for paying for the cost of the repeated course as well as the textbook unless it is in the Launch textbook inventory.

This policy is significantly different from most students' previous educational environments but reflects the reality that only those classes in which students earn an A, B, or C will transfer to a four-year program. The handbook also reminds students to "Be sure to complete the A–G Requirement to be eligible for a four-year college or university." As a result, 93% of Launch students have completed the A–G requirements by graduation, compared to just 29% of their reporting district (California Department of Education, 2015b). Likewise 91% of Latino students at Launch have completed the same requirements, compared to just 23% of Latino students in their reporting district (California Department of Education, 2015b). The A–G requirements are a critical benchmark for entrance into either the UC or CSU system.

Launch faculty reflected on the value of this form of support. As one explained, "By us not doing everything for you, we're actually empowering you to solve and think critically to

navigate the system when you have to go to college, because you are going to have to solve many similar problems." Launch students also acknowledged the value of learning first-hand their role as college students:

Having the experiences of what its like to be in a college class, because you don't go in scared anymore. When you go off to college, you know it's going to be tougher, but you have that extra edge on everyone else because they don't have the opportunities that you've had.

Faculty revealed that program alumni frequently visit campus to share experiences with students and give faculty updates on their postsecondary experiences. According to several Launch staff members, their messages reaffirm the importance of being exposed to the college culture:

When they go to college, what I don't hear them saying is, "Oh, I knew more than anyone else there." What I hear them saying was, "I got it more than anyone else there. I already understood I had to manage my time in college. I already understood I had to speak for myself. I already understood I had to use those office hours." So our students get the culture of college. And that's actually equally as important as being exposed to rigorous material.

By exposing students to both postsecondary systems and postsecondary cultures in a supported environment, these ECHS programs shifted student self-efficacy and helped to ensure future postsecondary success.

Advocacy, Accountability, and Fitting In

Self-advocacy teaches students to speak up for themselves and make their own decisions about their lives. It also teaches them how to find people who will support them in their journey and know their rights and responsibilities. In addition to increasing and changing the direction of student self-efficacy, data collected for this study suggest that ECHS programs can be instrumental in improving student self-advocacy. Faculty shared the importance of helping

students learn how to become their own best advocates. For example, a faculty member at Launch noted:

We explicitly teach self-advocacy to our students. Sometimes we get pushed from administrators to do a little bit more coddling and we push back and say, "No. Coddling is not going to help these students. No one is going to coddle them at a four-year university. You can't teach them that coddling is a method for success."

And another Launch staff member added, "We talk a lot about, and we try to incorporate across all grade levels and curriculums, self advocacy for the students."

Students throughout the focus groups shared their perceptions about accountability and advocacy. As one Launch student explained:

I became accountable to myself. I didn't let myself fail. If I did, I would just get up and have to work my way back to where I wanted my grades to be at. And I learned to be my own advocate.

They recognized that their initial experiences in their programs had the most significant impact on accountability and advocacy. One Central student offered, "Freshman and sophomore year is really what pushes...that self accountability. To not be distracted to do other things but to focus on your work."

In addition to developing self-advocacy and accountability, another positive consequence of these ECHS programs surfaced in conversations with staff and students alike: the overwhelming spirit of acceptance. Students in each of the focus groups revealed some of the challenges they had experienced at other schools—challenges involving fitting in and making friends. One Central student explained:

All the kids that would have gone to a regular high school and been declared socially awkward or different from everybody else or made fun of or bullied, we have our own sense of...not so much family, but community. We're all the same.

Faculty at both sites confirmed the unique culture of acceptance that had been embedded within both programs. The Launch faculty spoke fondly of students who seemingly "blossomed" in spaces that were supportive and encouraging:

They seem to really appreciate the freedom, to become their own individual, that maybe they had been in an environment where they weren't always accepted or they were a little bit different. And here, that's not a problem. Everybody is just fine, because it's the family and the culture.

By valuing individuality, each program has empowered students to not just think for themselves but to also accept others unconditionally. One Central staff member acknowledged:

Look, this school has a niche. We have a school of nerds, and I say that in a loving manner, because a lot of them would probably fall through the cracks. In fact, the kids make jokes about them all being nerds, because each person is such an individual and we have a full gamut of all kinds of students. And so it's fun to see how there's a very wide acceptance of those, whatever might not be accepted in comprehensive high school, here, that individuality is really valued.

Students seemed to respond positively, which complements the shift in self-efficacy and expected outcomes. Instead of falling through the cracks or continuing a cycle of limited academic achievement, they learned to accept others and value individual differences. As one Central student put it:

I grew up thinking, "I'm an outcast. I don't fit in." Over time I have learned, "Hey, I get along with these people just fine." We have some of the same things in common and even if we don't, they accept me.

A review of 2014–2015 behavioral data from both sites reflects significant variances from district level data. Measures of student suspensions, expulsions, and truancy indicate students were engaged and interested in attending class and learning (Table 9). There is little evidence of bullying, fighting, or altercations on either campus. Launch staff recognized the value of positive behaviors: "We support kids who are willing to come to school and work hard more than anything else. It makes our jobs easier and creates an environment that works."

Table 9
Student Behavior Measures (2014-2015)

	Lai	Launch		ntral
	School	School District		District
Suspension Rate ²	0.2%	8.6%	1.2%	6.5%
Expulsion Rate ²	0.0%	0.5%	0.0%	0.2%
Truancy Rate ³	5.13%	49.05%	10.77%	53.80%

Source: California Department of Education (2015d & 2015e)

Finding 4: Additional Supports to Ensure Success

Within the framework of social cognitive career theory, ECHS programs help students form enduring interests in education by changing their internal perspectives within an environment of positive experiences. For these positive experiences to occur, students likely need to supplement their toolboxes with new tools that support their endeavors. Thus, the fourth and final finding from this study illustrates how each of these programs has worked with students and their families to give them the knowledge and skills necessary for success, helping students to see firsthand the value of supportive relationships as they develop important academic and behavioral skills.

Providing Adult Support

The teachers are the most important part of it. Being able to have teachers that you associate with everyday lets you be closer to them. – Central student

Supportive adult relationships are clearly a lynchpin for both programs. Students in each focus group reiterated the importance and value of adult support. Students were very clear about support not being limited to a single adult; rather they felt this support existed across the entire

² Suspension and expulsion rates are determined by the number of suspensions and expulsions during the school year divided by the cumulative enrollment of the school.

³ The truancy rate is determined by the number of students in a school who are classified as truants during the school year compared to the cumulative enrollment of the school.

program. They recounted stories from their elementary or middle schools when they were "just one face in a sea of hundreds." One Launch student recalled his eighth grade English class, where a series of substitute teachers had rotated in and out during the second semester: "At the end of the year, I realized that no one cared or even knew my name. I am so lucky to have found Launch. These teachers changed my life."

Over and over again, students opened up about the adults who had impacted their lives in such significant ways. "I just feel that being closer to the teachers helps everyone overall.

They're able to guide you so much more," explained one Central student. Students understood that teachers who were committed to the program surrounded them:

You've got teachers who are willing to do more. Build relationships with students. They have to be willing to stay after school. I know at other schools, teachers leave as soon as they can. Here you have teachers who stay 'til five, six. If you need a room to study, they're here. – Central student

Students valued the connections and relationships that had been built over their four years. It was these relationships that had proven to be the change agent for many of them. They spoke freely about the value of having supportive adults throughout the program, but more importantly recognized the value of having adults who believed in them and their future. As two Central students explained:

We get that connection with the teachers. I definitely think it is something that helps us. When you get one-to-one with them, I consider it like a parent type of thing, but it's probably more. They can help us get where we want to go.

To me what really helped me personally is basically one teacher. She gave me support, emotional support, and everything like that. What I needed for myself. Then she pushed me even more. Honestly, I'd never seen myself as going to college or anything like that. I thought I was going to be floating around. She allowed me to see myself as something different.

Central faculty identified with the importance of building supportive relationships and shared their personal philosophies and strategies that reached far beyond an educator's standard job description:

Helping at risk kids—for me that means kids who have the potential but need someone. I want to feel like I am making a difference, and these are the kids I want to not just teach but completely support.

A Launch staff member noted that "we know every single student and have some direct impact." Yet another Launch teacher offered, "Knowing who they are, seeing them and their life and not just the surface part of them...but the heart part of them, that's how we build relationships with students."

Developing Skills

We are looking for the kids who are willing to do the work, and then we can support them. We can actually teach them the skills and build their skills more than we can entice them to turn in all their homework.- Launch faculty member

Developing a strong set of study and life or behavioral skills (sometimes referred to as soft skills) is tantamount to long-term academic success. Both Launch and Central have worked with students to develop strong academic skills while also helping them to develop other behavioral skills. As described earlier, Launch relies on the basic tenets of the AVID program to develop skills, while Central imbeds support throughout the core curriculum. Students had difficulty identifying specific cultural supports, but they were able to identify important skills that they had acquired. One Central student shared the following:

I think the biggest thing I learned here was discipline. From the beginning we were slowly transitioning to the college setting, but come our junior and senior years, and [they] more or less said, "Here's your classes. Here's whatever it's going to be. You're responsible to get everything done."

During the first focus group, students freely spoke about the skills they had gained while enrolled in the program and developed a list of specific behaviors and skills. Using this list, I

asked participants in subsequent groups whether they felt they had acquired these skills while enrolled at Launch or Central. Responsibility, discipline, collaboration, and independence topped the list of behavioral skills that students had learned, while organization, peer tutoring/group learning, and note taking strategies topped the list of study skills. The results are presented in Table 10.

Table 10
Student Perceptions of Newly Acquired Skills

Skills	Launch Focus Group #1	Launch Focus Group #2	Central Focus Group	Total
Behavioral Skills	-		_	
Responsibility	6	9	9	24
Discipline	6	9	9	24
Communication	6	7	6	19
Collaboration	6	8	8	22
Problem Solving	5	6	8	19
Independence	6	8	8	22
Study Skills				
Note Taking	6	7	9	22
Strategies	6	1	9	
Test Taking Strategies	4	7	6	17
Organization	6	9	8	23
Group Learning	6	7	8	21
Peer Tutoring	6	9	8	23
Critical Thinking	6	6	7	19

Interestingly, students were challenged to identify specific supports that addressed behavioral skill development, but they clearly also recognized the long-term effects of these programs. As one Central student explained:

I think I've learned a lot about how college works, and I feel a lot more prepared than a lot of people I've met because of the way the college works. You have to discipline yourself to get things done. You don't always have teachers on your back. That's a really good learning experience.

It is important to consider that behavioral skills uniquely manifest themselves through fully integrated systems of high cultural expectations rather than specific supports. While there is no set curriculum to develop responsibility or discipline, students in ECHS programs are strategically supported from the very beginning with faculty and staff providing opportunities for success that serve to reinforce desired behaviors.

In considering the development of critical study skills, students identified many of the specific programmatic supports that had created opportunities for growth. Organization, peer tutoring/group learning, and note taking strategies were the most recognized skills; students identified either their AVID curriculum or support classes as the primary vehicle for development. More than half recognized that important study skills were incorporated throughout their high school classes. One Launch student explained:

The high school teachers, they really push for organization. What they say is if you're not organized, you aren't going to make it. You have to be organized. You learn new ways to study or to get organized but the concept of being organized is still there.

Interviews with faculty and staff at both sites also provided insight into how they have used classroom time to encourage specific skill development. One Launch faculty member explained, "I try to teach the kids to be really competitive in the classroom." Another Launch staff member added:

Organization, time management, note taking, and discipline—they are all part of the program. We teach them backward planning for their assignments and then just the support of AVID—meeting in groups, using the Socratic method, the tutorial method to tackle problems that are difficult for them.

Students also found significant value in the experience of peer tutoring or group learning. Many shared how being able to speak freely with and learn from their own peers or students who were just a year or two ahead of them in the program had changed their perspectives. As one Launch student noted:

It's not just about being able to talk to someone the way you might talk to your friends. It's about seeing someone who looks just like you or comes from your neighborhood or has experienced many of the same things as you and seeing that they have made it. That really helped me in the first couple of years.

Faculty reinforced this concept in their comments. For example, one Launch faculty member explained that "the students that lived it very recently are those best to help them with different things." She continued:

I'll have a group that's in Library Strategies [course] together. I'll have another group that's in Health Education together. Then I'll have another group that's in Intro to Micro Computers. All the peer tutors have already been through all these classes and I put a peer tutor with every single tutorial group so that they can help them. So it's not necessarily me reading the syllabus with them. It's more about their partners or kids who've taken the class before going through and saying, "This is how you get through that class. This is how you read the syllabus."

Other Supports

Two additional themes centering on cultural supports developed traction during data analysis. The first involved support for families. Students overwhelmingly indicated that their families were supportive of their decisions to participate in an ECHS program. Many shared similar backgrounds in which neither parent had graduated from high school or had perhaps immigrated to this country after completing only elementary school. "Neither of my parents even went to high school, so for them, this is a great opportunity. My whole family wanted me to come here," shared one Central student. While families may indicate initial support in the idea, however, research indicates that the degree of family enculturation may have a direct impact on postsecondary success (Ojeda, Flores, Meza, & Morales, 2011 & Castillo, Conoley, Cepeda, Ivy, & Archuleta, 2010). Simply put, enculturation refers to the practice of holding on to one culture while living in another. Students from families with a high degree of enculturation have difficulty accessing postsecondary pathways.

Data from this study illustrate that both programs understand the importance of supporting families and parents during the ECHS course of study. One Launch site administrator explained:

Teaching the families to be strong, I think that's one thing that we were trying to improve here. We have a lot of conversations about college and things like that. Students get in the college and they go away, and then they don't like it. They're not strong enough to make it there emotionally, and they come back. It's not too many, but training those students to be strong and training their families as well. That's something that we always talk about.

Managing college expectations and simply understanding the value of postsecondary education can be difficult for some families. As one Central faculty member noted:

We deal with parents a lot of the time. Kids get pressure from parents to stay home and work and contribute to the family. I totally get that. And for those kids, the CSU can be an accomplishment. It's an option. It's better than not going to college at all and not breaking the cycle.

Launch staff explained that language is often a barrier for families; both sites expressed a need to do a better job of supporting families in that area. "Our greatest challenge is just that for one, the majority of the parents are not native English speakers, and there is a communication breakdown with the school and home. We do the best we can," admitted the site counselor. At the other site, similar sentiments were shared:

Providing more supports for the parents in their language, and just making sure our staff is mindful of all of the intercultural differences when students come to school late or different things, just making sure that we aren't judging them right away or things like that.

For the past four years, Launch has offered a program called Parent University, which is designed to provide parents with the tools to help their child be successful. In the year that the current study was conducted, they offered it in English as well as Spanish. The response was very good and administrators are looking for additional ways to engage Latino parents. The Launch site administrator explained the program's purpose:

Through Parent University we talk about ways that all of our parents can support our students because they're not going to be able to sometimes help them with their calculus homework or different sorts of things. We make sure that we talk about things that they can do, and questions they can ask, and things they should be doing in order to support them better.

The other cultural support that was evident at both sites was a full list of programs to help students successfully transfer to four-year universities. While not discussed in great detail with either the students or staff, I observed informational messages about SAT and ACT preparation courses, flyers advertising workshops to learn about the Free Application for Federal Student Aid (FAFSA), clerical staff to assist with scholarship applications and afterschool workshops to help juniors begin to understand the college application process. Unfortunately, neither site could produce comprehensive data about student postsecondary placement. Instead, I relied on various public databases to access evidence of the impact of these supports (Table 11).

Table 11
Student College Access Measures

	Launch		C4040	Central	
	School	District	State	School	District
2013–2014 SAT Scores (>=1,500)	57%	30%	46%	44%	25%
Average Reading Score	520	461	492	487	440
Average Math Score	513	455	506	502	445
Average Writing Score	504	452	489	468	435
2014–2015 ACT Scores (>=21)	58%	39%	57%	54%	29%
Average Reading Score	22	20	22	21	19
Average Math Score	23	19	22	21	19
Average English Score	21	19	22	21	17
2015 FAFSA completion	75%	45%	60%	100%	68%
2015 CSU early assessment					
program	96%	46%	56%	86%	41%
ELA Math	62%	15%	29%	50%	15%

Sources: California Department of Education (2015f), The Education Trust-West (2016), and the CSU Office of the Chancellor (2015)

These outcome measures indicate that student achievement at both sites exceeds student achievement within their resident districts. Specifically looking at average SAT and ACT scores, which are used nationwide as a measure of college readiness, both Launch and Central significantly exceed district averages in reading, math, and English with Launch meeting or exceeding state averages in every measure except ACT English. Both sites also posted a higher percentage of students filing the Free Application for Federal student Aid (FAFSA), another standard indicator of postsecondary transition. Finally, a review of the California State University Early Assessment Program which measures student readiness for college-level English and math, indicates that students at both sites far exceeded both their district measures, as well as, the overall state measure. These findings provide credible, if somewhat anecdotal,

evidence that both ECHS programs are accomplishing their goals.

Summary of Findings

In this chapter, I presented findings that illustrate the supports imbedded within two Early College High School programs that have impacted Latino achievement. The findings were organized by anticipated outcomes identified in the ECHS theory of change model. Data suggest that outcomes as well as supports could be broken into two groups—programmatic or structural supports and student centered or cultural supports. Within structural supports, students and staff both identified program elements aimed at increasing student academic skills as well as academic rigor. Additionally, students and staff also identified critical components of the organizational structure as key to student success. These included program structure, student fit, and teacher fit.

Within cultural supports, students were less likely to specifically identify specific supports but could easily discuss the end results. Improving student self-efficacy and changing expected outcomes were key to increasing student achievement, and these findings illustrate how both programs developed lasting supports to effect change. The final group of findings illustrates the importance of support students through cultural barriers involving adult relationships, family support, and general college knowledge. Students and staff provided rich details about each program, showcasing a variety of supports that can positively impact Latino achievement.

CHAPTER 6:

DISCUSSION

In this qualitative study, I examined two Early College High School programs in rural Central California that have combined comprehensive high school curricula with postsecondary dual enrollment opportunities to increase academic rigor, improve student self-efficacy, and redirect the life trajectories of many of their students. I looked specifically at the structural and cultural supports embedded in each of the programs to better understand opportunities for impacting Latino student achievement. I specifically sought to answer the following research questions:

- 1. What initially attracts students to enroll in an ECHS program?
- 2. What are the specific support systems within the school setting that motivate students to continue in an ECHS?
- 3. What benefits and challenges have students experienced in high school as part of an ECHS program?
- 4. What benefits and challenges do staff encounter while working at an ECHS program?

I relied on student focus groups with high school seniors and interviews with program staff members to learn more about each of these unique programs. In this chapter, I summarize key findings within the context of the ECHS theory of change model and social cognitive career framework. I then present implications and recommendations for future research, along with the study's limitations, and concluding thoughts and reflections.

Enhancing a Theory of Change

As described in Chapter 3, ECHS programs offer a theory of change to illustrate the various support systems that constitute an integral component of their structure. Beginning at the top, with the long-term goal of increased enrollment and graduation from four-year postsecondary institutions, the model works backward to identify subgoals (increased high school graduation, college credit completion) and illustrate a pathway of change. This pathway visually depicts the outcomes that are needed within an ECHS program in order for the long-term goal to be accomplished.

Initially, five outcomes were established to support the single long-term goal (see Figure 2 in Chapter 3). They included: improved student outcomes; improved student learning; improved attitudes toward self; improved attitudes toward school; and increased aspirations toward college. These outcomes are supported by existing theories and findings from the literature, and a range of program interventions and supports are embedded in the pathway to facilitate them. These interventions represent the actual support systems identified in the Early College High School Initiative and in the literature as instrumental to student achievement. Finally, the basic assumptions or universally accepted tenets of ECHS programs were disclosed to provide a starting point to the pathway and foundation for the theory of change.

The initial theory of change was created as a supposition about ECHS support systems, and the intent of this study was to prove, disprove, or modify the theory. The results indicate that while all of the projected outcomes are instrumental in reaching the program's long-term goal, some minor revisions and an additional outcome are necessary to paint a complete picture.

Revisions and additions to the theory of change are presented on the following page (Figure 5).

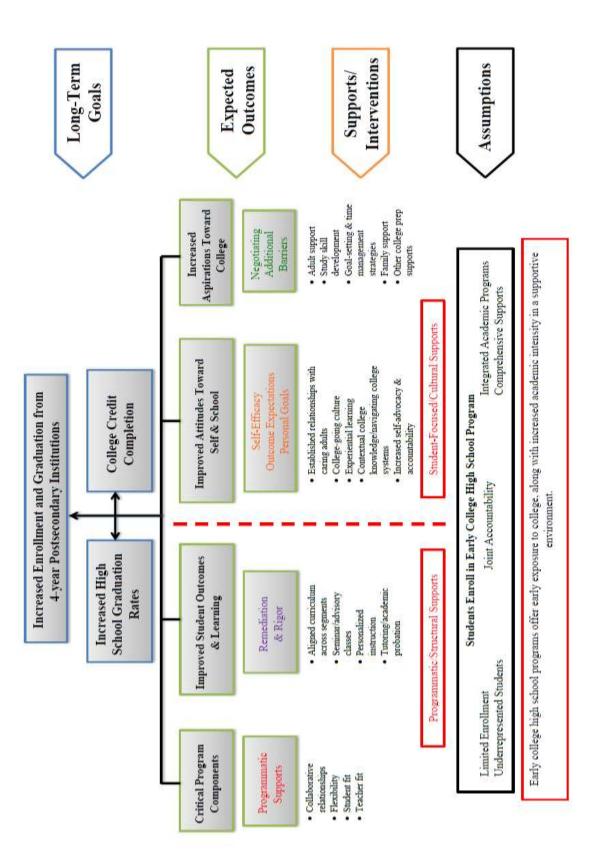


Figure 5. Enhanced theory of change for Early College High School programs.

Revisiting Programmatic/Structural Outcomes

The need for an additional outcome presented itself as a result of data collected during staff interviews and student focus groups. It is actually a combination of three critical programmatic components. The first component suggests an organizational structure that is flexible and built upon core relationships between key partners—typically the postsecondary partner, the high school district, and the ECHS program. Staff repeatedly addressed the need for flexibility and responsiveness and presented key examples to support their claim. Likewise, students suggested that good working relationships were important to successful programs, and they were surprisingly unaware of the challenges that Central staff had faced since the program's inception.

The impact of strong collaboration was evidenced by teacher comments, campus facilities, and student engagement. At Launch, staff spoke repeatedly about the positive impact of the collaboration; their facilities were small but they adequately supported the student population. By comparison, all of the participating staff from Central referred to issues stemming from the lack of a solid and supportive relationship. Likewise, their campus was located at the rear of a larger district program, disconnected from their postsecondary partner.

Poorly resourced schools and facilities can play a significant role in academic achievement for students (Orfield & Frankenberg, 2014); in California, where Latino students often represent the majority, poorly resourced schools often create an additional barrier to their academic success. The current findings support the concept that programs that are responsive to student needs and are rich in organizational support can have a significant impact on student engagement and achievement.

While the burden of developing and implementing these two ECHS programs falls at the feet of their K-12 districts, postsecondary partners can also be leaders in such efforts. At first glance, the obvious includes things like adequate facilities and student support; but digging deeper, these new programs may also require changes to existing policies and a shift in vision with regards to teaching and learning. Depending upon the culture of the institution, leaders may need to explore ways to encourage faculty to expand their instructional practices and consider a newly defined 'student'.

The remaining two supports that pointed to the need for an additional outcome draw attention to the importance of student fit and teacher fit in ECHS programs. Both sites initially rely upon a base level of student competency for admission. Launch uses a much more robust system of recommendations and in-person interviews before ultimately entering qualified students into a lottery. Staff at both sites suggested that student desire—or "grit"—is far more important than student skill in determining student success. As one faculty member explained, "I don't know that we've ever had a student who couldn't be successful here. But we have had students who won't be successful here, who chose that." Students who want to participate can be supported and encouraged, but students who lack the desire will ultimately self-sabotage and find other high school options.

Equally important to the success of each program are highly dedicated and supportive teachers. Research illustrates the value of quality teachers with populations of traditionally underserved students (Castillo et al., 2010). Both sites benefited from corps of teachers exhibiting a strong work ethic, high levels of personal accountability, and a culture of unwavering commitment. They boast years of experience, and turnover is virtually nonexistent; a majority of interviewed staff members had been with these ECHS programs since inception.

Students revealed over and over again the significance of the staff and the impact they had made in their lives.

The other modification to the programmatic or structural outcomes outlined in the theory of change involves combining two of the original outcomes—specifically, improved student outcomes with improved student learning. This more accurately reflects the totality of the interventions that support the two outcomes together: increasing student academic skills while also increasing academic rigor, both cornerstones of ECHS programs. These are also outcomes that speak specifically to Latino achievement deficits.

Research indicates that Latino students enter kindergarten far below their white peers in terms of school readiness skills, and this gap widens over time (Gándara, 2010; O'Donnell, 2008). Additionally, a rigorous high school curriculum counts more than anything else in precollegiate history in providing momentum toward completing a bachelor's degree (Adelman, 2006). Findings from this study suggest that interventions or supports most significantly impacting these outcomes are intertwined within the ECHS program. Seminar-type advisory classes, personalized instruction, academic probation, and aligned curricula link together to support student learning. By raising the bar in core classes and offering multiple levels of scaffolding and differentiated instruction, academic skills are improved and course content becomes more rigorous. Students are seemingly oblivious to the supports, and they escape the sometimes damaging labels affixed to remedial instruction.

Revisiting Student-Focused Cultural Outcomes

Next, I explore the significant student-focused or cultural outcomes and supports identified by the findings. Once again, findings encourage minor modifications to the original model—first combining the original three outcomes that address student attitudes and personal

goals, and then shifting the focus of the final outcome to address additional barriers. Data suggest that the interventions that support the three original outcomes actually overlap and frequently work together to encourage student success. Close examination reveals that these interventions are so tightly embedded together, it can be difficult to differentiate between them therefore in the revised Theory of Change, Improved Attitudes Toward Self and Improved Attitudes Toward School have been combined into one, overarching outcome. This edit is further supported by the framework of the social cognitive career theory SCCT, which posits that student learning is only truly sustained when students see the value of the learning and internalize the benefits based on expected outcomes (Lent et al., 1999).

College-going culture. Establishing a college-going culture that permeates the organization is critical to changing expected outcomes and self-efficacy. Both Launch and Central have embraced such a culture from every angle; the message is the same in every piece of collateral material, throughout all the hallways, on every message board, within the classrooms and, most importantly, within every aspect of the curriculum: College is a reality. In addition to providing an environment that showcases college opportunities, students are supported and guided into opportunities for success. They begin to see the possibilities and change their expectations.

Interestingly, when students were asked to identify specific supports that had allowed them to change their expectations, they came up short. While they were quick to acknowledge the impact of a supportive culture, they simply could not identify how each of the programs had created or sustained that culture. I mentioned this to several faculty members and finally realized that this culture of success and high expectations was simply all that these students knew. They had entered these programs as high school freshmen and were instantly immersed. They had no

previous high school experience to compare it with and, because the culture was so universally engrained throughout the program, everything seemed quite "normal." Because faculty members had a wealth of institutional history and commitment to the overarching ECHS concepts, they approached it almost matter-of-factly and it became a seamless transition for students.

Dual enrollment. Students clearly benefit from the experiential learning that comes from dual enrollment. Effective programs offer an opportunity for both anticipatory socialization and role rehearsal, providing students with opportunities to learn all the aspects of a college role before they actually have to leave the comforts and supports of their high school programs. Additionally, they develop the technical skills needed to perform college-level work while learning the role—the habits, attitudes, and behaviors—and developing strategies to successfully play the role by seeing how other people react to their attempts (Mechur Karp, 2012). ECHS students begin to see themselves as college students as they learn firsthand the systems and culture of postsecondary institutions. Findings from this study illustrate the impact of a well-supported dual enrollment environment. In addition to earning significant amounts of college credit while still in high school, students acknowledged the value of understanding the system and access additional support. Faculty understood the importance of providing the contextual knowledge while helping students learn to navigate postsecondary systems.

Acceptance and support. Guiding students along a pathway to increased self-advocacy and accountability while embracing a spirit of acceptance has proved to be another important support for many of the students participating in this study. Like other supports, it is incorporated across all grade levels and curricula, and students look back and see the value of changing behaviors and expectations in the initial (freshman and sophomore) years of the program. Both programs revealed an unanticipated propensity of acceptance within their cultures. Students and

faculty alike spoke of the importance of valuing individuality and accepting one another, despite their differences—something that many might fear would not be the case in traditional high school environments. Institutional data provide additional evidence to support these caring and supportive environments. Student suspensions, expulsions, and truancies are significantly less than district averages at both sites. Intricately woven and embedded supports are working to shift expected outcomes and student self-efficacy, which in turn has a profound effect on students' postsecondary success and personal goals.

By shifting the focus of the final outcome to address additional barriers, we can identify many of the additional cultural supports that ECHS programs embrace to specifically support Latino achievement—supportive adult relationships, skill development, and family support. First, supportive adult relationships are instrumental for developing student success within ECHS programs. Literature suggests that underrepresented students often attend schools that are poorly resourced and unsupported. Latino students' high dropout rate and lack of persistence is related, in part, to their lack of attachment to school and a sense of not belonging (Fry & Lopez, 2012). Both of the sites participating in this study have relied on supportive adult relationships to engage students and give them a sense of purpose along with a sense of belonging. Several students described their relationships with adults throughout each of the programs as life changing.

By providing students with supports to develop a robust set of study and behavioral skills, ECHS programs increase the probability of long-term academic success. While study skills are often developed through a targeted and specific curriculum, behavioral skills are developed through fully integrated systems of high cultural expectations. Students recognize that they are more responsible and disciplined after engaging in an ECHS program during their high

school years but they are challenged to describe exactly how these skills develop. Conversely, students at Launch identified AVID as a key support for developing strong study skills while students at both sites found significant value in peer tutoring and group learning as a support.

Supporting families throughout the ECHS program is often critical to student success. Because underrepresented students are the focus of the initiative, we find student demographics that reflect large numbers of socioeconomically disadvantaged Latino students. These students come from homes where parental education is often low or where parents may lack English speaking skills more frequently than students from other ethnic groups (Gándara, 2010).

Additionally, a high degree of enculturation in traditional Latino families can have a direct impact on postsecondary success (Castillo et al., 2010). While both Launch and Central reported being keenly aware of the need to provide a robust family support program, it continues to be an unresolved issue. Offering Parent University in both English and Spanish has provided better outcomes at Launch; continued outreach to parents, to offer examples of ways to support student efforts at home, has encouraged a better understanding of college expectations.

In sum, the robust network of structural and cultural supports built into ECHS programs facilitates an environment of rigorous student learning. It offers students opportunities to change their expectations, improve their self-efficacy, and achieve newly defined personal goals. While Latino students from rural communities are the focus of this study, many of these findings could be expanded to include students of different cultures or ethnicities, living in a variety of geographic areas. The key is building a network of supports that is both flexible and responsive to student needs. By focusing on transforming student self-efficacy within the context of improving academic skills, ECHS programs can affect change throughout the educational system, regardless of race, socioeconomic status, or geographic area.

Implications

Research shows that Latino students enter kindergarten far below their white peers in terms of school readiness skills. Specifically, "only one-half as many Latino children as white children are in the highest quartile of math and reading skills at the beginning of kindergarten, and more than twice as many fall into the lowest quartile" (Gándara, 2010, p. 24). In the absence of effective interventions, deficits in school achievement in the early grades have a tendency to widen over time (Murphey et al., 2014). With Latino students making up an increasing portion of the school-aged population and estimates that indicate an increasing number of jobs requiring a postsecondary degree or certificate by 2020 (Carnevale et al., 2013), a need for improved educational opportunities that increase Latino achievement and break the cycle of underachievement is important. ECHS programs are an alternative to traditional high schools, offering a supported dual/concurrent enrollment curriculum for often underrepresented students. They provide a viable educational alternative to help close the Latino achievement gap but as illustrated by the study's theory of change it is a bit more complicated than initially expected.

The importance of strong, collaborative relationships bringing secondary educational partners together with postsecondary partners was clearly understood as a key element of robust ECHS programs when developing the initial Theory of Change. But through insightful conversations with students and faculty, the true necessity of synchronized collaboration became clear. As more and more ECHS programs are considered around the country, it will be critically important that they are founded in solid relationships focused on student needs.

There is evidence that ECHS programs address many of the factors impacting Latino academic achievement within the education system and perhaps more specifically within rural communities. From the outset, the core high school curriculum is embedded with scaffolded

remediation to address student-learning deficits. Courses are purposefully rigorous to prepare students for future college classes, and students are introduced to a variety of study skills to further assist their learning. Additionally, ECHS programs embrace a culture of achievement and accountability that better supports Latino students and offsets home environments where parents may lack necessary knowledge and skills to assist their children (Alexander et al., 1997).

ECHS programs create supported structures that are responsive to students' needs while exposing them to postsecondary expectations, standards, and norms (Fry & Lopez, 2012). By providing students with positive college experiences while they are still in a high school setting, students observe and then imitate the role of college student (Mechur Karp, 2012), shifting their self-efficacy, and increasing the likelihood of earning a college degree (Adelman, 2006; Swanson, 2008). Literature supporting the social cognitive career theory suggests that when environments are successful in exposing students to positive experiences that increase self-efficacy and provide positive outcome expectations, personal goals can increase (Lent et al., 1999). ECHS programs provide multiple layers of effective supports within a dual enrollment setting to shift personal goals.

Along the way, teachers play an instrumental role in each ECHS program. First, by blanketing each campus with information about college information, high school graduation, and career opportunities, faculty and staff lay the groundwork for student success (Castillo et al., 2010). Additionally, ECHS staff deftly create a culture of high expectations that permeates the program and both encourages and supports students. Finally, these same staff members form trusted relationships with students, many of whom have never experienced adult support of such magnitude. These relationships are an additional support related to changing students' expected outcomes and personal goals (Behnke et al., 2010).

Finally, ECHS programs use targeted supports to engage families and increase the level of college knowledge for every stakeholder. For many Latino students, a strong ethnic identity provides a sense of belonging and support, protecting them from unfamiliar cultures. But this elevated level of enculturation may also compromise guidance and support offered by unfamiliar support systems (Gonzalez et al., 2002). Through targeted and effective outreach, ECHS programs build trust with highly enculturated Latino students' families and have a positive impact on student confidence and outcomes (Ojeda et al., 2011).

Recommendations for Future Research

This study offers a better understanding of ECHS programs and their impact on Latino students. Data indicate that within a network of coordinated supports, ECHS programs can significantly impact Latino academic achievement, increasing students' rates of access to postsecondary experiences. While findings from this study support the impact of these programs, there is still a need for additional research to more fully understand the continuum of supports that would afford replication and sustainability of future ECHS programs.

As a start, each of the coordinated supports—improved academic skills, programmatic structures, teacher effectiveness, and family engagement—should be examined in greater detail; the key elements of each of these supports, as well as systems to measure their impact, should be explored. Additionally, there is very little information available to measure outcomes or capture longitudinal data related to ECHS programs and their specific impact on Latino students. While recent research suggests that ECHS students are more likely to graduate from high school, earn substantial college credit in high school, enroll in college immediately after high school, and return to college for a second year (Berger et al., 2014), data are limited to specific geographic

regions and are not disaggregated to highlight specific Latino experiences; nor do these data follow students completely through the postsecondary cycle.

At the other end of the ECHS pipeline, research around student fit and recruitment could prove to be instrumental to both existing and future programs. Ideally, a study of students entering ECHS programs—the specific skills they possess, as well as the deficits that are manifested within the first few months of the program and the sources of motivation for students who choose these unique paths—would be very informative for a variety of stakeholders.

Finally, research on the fiscal components of ECHS programs could support further expansion and replication. By providing partnering organizations, such as high school districts, community colleges, and even four-year universities, with data and best practices for programmatic operations, ECHS programs can continue to grow and replicate.

Limitations

This study was limited to two early college high school programs in California. It was also limited to a total of 24 twelfth grade Latino students versus students from any other grade or ethnicity at either site. While students were happy to share their experiences and insights regarding Early College High School, speaking to them as they were concluding their journey may have provided a slightly distorted view of reality. Students' memories of the struggles they experienced during their four years in the program may have been overshadowed or diminished with the excitement of graduation and enrollment at four-year universities on the horizon. This study was also limited to only a sampling of staff members from either site. Additionally, while student and staff perspectives were documented throughout the study and observations and document review provided evidentiary support, there was limited outcome data to unequivocally substantiate the impact of either program.

The study looked at ECHS programs primarily from each of the high schools' perspective which limits the complete landscape. There are certainly two additional stories to be told to fully understand both the burden and the impact of these programs – one from the perspective of the postsecondary partner and one from the perspective of the administrative entities. The voice of each of these important partners was not included in this limited study. To fully evaluate ECHS programs, it is important to learn from college faculty and support staff, as well as, traditional college students about the integration of ECHS programs on their campuses and their perceived impact on the students they are serving. Likewise, perspectives from the K-12 district and postsecondary administrators could shed light on additional burdens or barriers that these unconventional programs encounter. It likely requires a new way of thinking and a willingness to break from traditional structures and methodologies.

Thoughts and Reflection

With the numbers of Latino students increasing around the United States, and estimates indicating that a growing number of jobs will require postsecondary degrees or certificates, it is imperative that we examine opportunities to increase Latino academic achievement. Early College High School offers a solution. By combining a rigorous high school curriculum with dual enrollment in postsecondary coursework, these programs can effectively change students' educational trajectories. This study provided an opportunity to look more closely at two such programs offered in Central California where Latino population growth is requiring educators to continually look for opportunities for change.

It is interesting to consider that Central California is home to over 6.5 million people, covering 22,000 square miles, and yet only a handful of Early College High School programs

have been established since the initiative was first developed in 2002. The time has come for school districts throughout this important economic area to consider the potential of these unique collaborations. Although small in scale, Early College High Schools effectively encompass many of the elements needed to successfully reach historically underserved students. The Early College High School Initiative illustrates how a strategically developed program, addressing the critical needs of students, can begin to create change. The impact, while relatively small initially, has the potential to ripple through communities and provide new opportunities for students and their families while also supporting economic development. Realistically, will these programs have the ability to cure all that ails today's K–12 educational systems? Certainly not. But by focusing on specific populations of students, addressing their needs, and offering integrated programs to effectively change their educational outcomes, we can see the possibilities.

APPENDIX A:

STUDENT RECRUITMENT LETTER

Early College High School: Closing the Latino Achievement Gap

March 2016

Dear Student:

You are invited to take part in an important research project that will be used to better understand the components of Early College High School programs that have made a positive impact on Latino student achievement. Information gained through this study will assist new and developing programs with information about effective student supports.

My name is Kristen Beall and I am a doctoral student in Educational Leadership at the Graduate School of Education & Information Studies at the University of California, Los Angeles. I have requested your Principal to provide this invitation to you on my behalf. I am requesting your participation with the data collection process for this research. Should you choose to participate in this research, you will attend one 90-minute focus group. Your participation in this study will prove extremely valuable to improve the experiences of students in future Early College High School programs.

If you are willing to participate in this research, I ask that you review the consent form for this research, sign it, and return it to your Principal.

Thank you in advance for your consideration of participation in this study. If you have any questions concerning this study, please email me at krabarnes@gmail.com or contact my advisor, Dr. Tina Christie, at tina.christie@ucla.edu.

I look forward to working with you.

Sincerely, Kristen Beall Educational Leadership Program, UCLA

APPENDIX B:

STUDENT CONSENT TO PARTICIPATE IN RESEARCH

Early College High School: Closing the Latino Achievement Gap

Kristen Beall (principal investigator) from the Graduate School of Education & Information Studies at the University of California, Los Angeles (UCLA) is conducting a research study under the guidance of Dr. Christina Christie (faculty sponsor).

You were selected as a possible participant in this study because you are a student at Launch/Central High School. Your participation in this research study is voluntary.

Why is this study being done?

The purpose of this study is to better understand the components of Early College High School programs that have made a positive impact on Latino student achievement. I hope to provide a study which will assist new and developing programs with information about effective student supports.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following: participate in a focus group discussion with 5 or 6 fellow students, on campus during the normal school day. The researcher will ask you to respond to questions about your school's program, more specifically:

- How did you hear about this school?
- Tell me your story about why you chose this school.
- Did anyone encourage/discourage your decision to attend this school? Why?
- What qualities did you possess that prepared you for the rigor of college classes at such a young age?
- What support do you receive from your teachers? Advisors? Family? Peers?
- Can you identify specific programs that have supported your success? AVID? STEM? Tutors? Career planning?
- What additional support would have been helpful?
- Talk to me about being able to maintain everyday life of high school and being a college student at the same time.
- What challenges did you experience academically?
- What challenges did you experience socially?
- Did you face challenges from family while trying to earn college credits?
- Are you able to participate in extracurricular activities? If so, which ones?
- Do you have a part-time job?
- As you entered into this program at the beginning of your freshman year, what successes did you expect to achieve?
- Looking back on the past four years as an early college high school student, what is some evidence that you have been successful?

Additionally, the researcher will spend two to three days on campus observing classes and student activities.

How long will I be in the research study?

Participation will take a total of about 90 minutes.

Are there any potential risks or discomforts that I can expect from this study?

There are no anticipated risks or discomforts.

Are there any potential benefits if I participate?

The results of the research may help to develop more Early College High School programs in the future.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of a self-assigned pseudonym during our discussion. This pseudonym will be used as our discussion is transcribed into text. The audio recording of our discussion will be destroyed once our discussion has been transcribed. Additionally, you will be able to review the transcript of our discussion at any time during the research.

What are my rights if I take part in this study?

- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

• The research team:

If you have any questions, comments or concerns about the research, you can talk to one of the researchers. Please contact:

Principal Investigator	Faculty Sponsor
Kristen Beall	Dr. Christina Christie
(661)619-9578	(310)825-0432
krabarnes@gmail.com	tina.christie@UCLA.edu

• UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122, or write to:

UCLA Office of the Human Research Protection Program 11000 Kinross Avenue, Suite 211, Box 951694 Los Angeles, CA 90095-1694

SIGNATURE OF STUDY PARTICIPANT

You will be given a copy of this information to keep for your records.

Name of Participant	
Signature of Participant	Date
SIGNATURE OF PERSON OBTAINING	CONSENT
Name of Person Obtaining Consent	Contact Number
Signature of Person Obtaining Consent	Date

APPENDIX C:

PARENT CONSENT FOR MINOR TO PARTICIPATE IN RESEARCH

Early College High School: Closing the Latino Achievement Gap

Kristen Beall (principal investigator) from the Graduate School of Education & Information Studies at the University of California, Los Angeles (UCLA) is conducting a research study under the guidance of Dr. Christina Christie (faculty sponsor).

Your child was selected as a possible participant in this study because they attend Launch/Central High School. Your child's participation in this research study is voluntary.

Why is this study being done?

The purpose of this study is to better understand the components of Early College High School programs that have made a positive impact on Latino student achievement. I hope to provide a study which will assist new and developing programs with information about effective student supports.

What will happen if my child takes part in this research study?

If you agree to allow your child to participate in this study, the researcher will ask them to participate in a focus group discussion with 5 or 6 fellow students, on campus during the normal school day. The researcher will ask them to respond to questions about the school's program, more specifically:

- How did you hear about this school?
- Tell me your story about why you chose this school.
- Did anyone encourage/discourage your decision to attend this school? Why?
- What qualities did you possess that prepared you for the rigor of college classes at such a young age?
- What support do you receive from your teachers? Advisors? Family? Peers?
- Can you identify specific programs that have supported your success? AVID? STEM? Tutors? Career planning?
- What additional support would have been helpful?
- Talk to me about being able to maintain everyday life of high school and being a college student at the same time.
- What challenges did you experience academically?
- What challenges did you experience socially?
- Did you face challenges from family while trying to earn college credits?
- Are you able to participate in extracurricular activities? If so, which ones?
- Do you have a part-time job?
- As you entered into this program at the beginning of your freshman year, what successes did you expect to achieve?
- Looking back on the past four years as an early college high school student, what is some evidence that you have been successful?

Additionally, the researcher will spend two to three days on campus observing classes and student activities.

How long will my child be in the research study?

Participation will take a total of about 90 minutes.

Are there any potential risks or discomforts that my child can expect from this study?

There are no anticipated risks or discomforts.

Are there any potential benefits to my child if he or she participates?

The results of the research may help to develop more Early College High School programs in the future.

Will information about my child's participation be kept confidential?

Any information that is obtained in connection with this study and that can identify your child will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of a self-assigned pseudonym during our discussion. This pseudonym will be used as our discussion is transcribed into text. The audio recording of our discussion will be destroyed once our discussion has been transcribed. Additionally, you and your child will be able to review the transcript of our discussion at any time during the research.

What are my and my child's rights if he or she takes part in this study?

- You can choose whether or not you want your child to be in this study, and you may withdraw your permission and discontinue your child's participation at any time.
- Whatever decision you make, there will be no penalty to you or your child, and no loss of benefits to which you or your child were otherwise entitled.
- Your child may refuse to answer any questions that he/she does not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

• The research team:

If you have any questions, comments or concerns about the research, you can talk to the one of the researchers. Please contact:

Principal Investigator	Faculty Sponsor
Kristen Beall	Dr. Christina Christie
(661)619-9578	(310)825-0432
krabarnes@gmail.com	tina.christie@UCLA.edu

• UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your child's rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to:

UCLA Office of the Human Research Protection Program 11000 Kinross Avenue, Suite 211, Box 951694 Los Angeles, CA 90095-1694

SIGNATURE OF PARENT OR LEGAL GUARDIAN

Name of Person Obtaining Consent

You will be given a copy of this information to keep for your records.

Name of Child Name of Parent or Legal Guardian Signature of Parent or Legal Guardian Date

Contact Number

APPENDIX D:

STUDENT CONSENT TO PARTICIPATE IN RESEARCH

Early College High School: Closing the Latino Achievement Gap

- 1. My name is Kristen Beall.
- 2. I am asking you to take part in a research study because I am trying to better understand the components of Early College High School programs that have made a positive impact on Latino student achievement. I hope to provide a study which will assist new and developing programs with information about effective student supports.
- 3. If you agree to be in this study, I will ask you to participate in a focus group discussion with 5 or 6 fellow students, on campus during the normal school day. The discussion will last about 90 minutes. I will also visit campus two or three days during my research to observe classes and student activities.
- 4. There are no anticipated risks or discomforts from participating in this study.
- 5. The results of the research may help to develop more Early College High School programs in the future.
- 6. Please talk this over with your parents before you decide whether or not to participate. We will also ask your parents to give their permission for you to take part in this study. But even if your parents say "yes" you can still decide not to do this.
- 7. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you and no one will be upset if you don't want to participate or even if you change your mind later and want to stop.
- 8. You can ask any questions that you have about the study. If you have a question later that you didn't think of now, you can call me at (661) 619-9578 or ask me when you see me on campus.
- 9. Signing your name at the bottom means that you agree to be in this study. You and your parents will be given a copy of this form after you have signed it.

Name of Subject	Date

APPENDIX E:

RECRUITMENT EMAIL FOR STAFF PARTICIPANTS

Early College High School: Closing the Latino Achievement Gap

March 2016

Dear Administrator and Staff:

This email was sent to you because you are on staff at Design Science High School. If you are interested, you may participate in a research study conducted by Kristen Beall (principal investigator) from the Graduate School of Education & Information Studies at the University of California, Los Angeles (UCLA). The study, entitled: *Early College High School: Closing the Latino Achievement Gap*, seeks administrative and staff participants who work with students in Early College High School programs.

What I will be asked?

Those who agree to participate in the study will be individually interviewed for 30–45 minutes on campus. During this interview, you will be asked general questions about the program, as well as specific questions about student supports—both academic and non-academic—that are imbedded in the program.

Your participation in this study is strictly voluntary and will be anonymous. To insure confidentiality, a pseudonym will be given to you and no other identifiable data will be disclosed.

Why is this study being conducted?

The purpose of this study is to better understand the components of Early College High School programs that have made a positive impact on Latino student achievement. We hope to provide a study which will assist new and developing programs with information about effective student supports.

What will happen if I participate in the study?

If you decide to participate in the study, you may contact the researcher via email to set up a time/date for your interview. The interview will take place on campus in a vacant classroom or area of your choosing that will be a private setting, lasting 30–45 minutes. You may refuse to answer any question that you do not want to answer and still remain in the study.

At any time during the study, you may decline your participation (withdraw from the study) and the researcher will not use any data collected from your interview. The interviews will be voice

recorded and you will be allowed to view the transcript of the interview for approval, before the researcher writes the results.

The researcher may need to contact you for clarification during the research period, which will be from March 2016 to April 2016. If you do not wish to be contacted after the interview, you may request so after the interview and/or at any time during the research period.

How do I participate?

If you would like to participate, you may contact the researcher via email: krabarnes@gmail.com.

Questions or concerns?

You may contact Kristen Beall at (661) 619-9578 or by email at krabarnes@gmail.com. The chair for this study is Dr. Tina Christie, UCLA Graduate School of Education & Information Studies.

If you have any questions regarding your rights while taking part in this study, or you have questions or concerns or suggestions and you want to talk to someone other than the researcher about the study, please call the OHRPP at (310) 825-7122 or write to:

UCLA Office of the Human Research Protection Program 11000 Kinross Avenue, Suite 211, Box 951694 Los Angeles, CA 90095-1694

Thank you.

APPENDIX F:

STAFF CONSENT TO PARTICIPATE IN RESEARCH

Early College High School: Closing the Latino Achievement Gap

Kristen Beall (principal investigator) from the Graduate School of Education & Information Studies at the University of California, Los Angeles (UCLA) is conducting a research study under the guidance of Dr. Christina Christie (faculty sponsor).

You were selected as a possible participant in this study because you are on staff at Launch/Central High School. Your participation in this research study is voluntary.

Why is this study being done?

The purpose of this study is to better understand the components of Early College High School (ECHS) programs that have made a positive impact on Latino student achievement. I hope to provide a study which will assist new and developing programs with information about effective student supports.

What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following: participate in a private interview, typically within your office or workspace. The researcher will ask you to respond to questions about your school's program, more specifically:

- What makes your school different from the neighboring high schools?
- Why would you say students/parents select this school over neighboring high school options?
- What are the efforts this school makes to facilitate college participation?
- What are the academic supports offered by this school to support student achievement?
- What are the non-academic supports offered by this school to support student achievement?
- Has consideration been given to specific supports to facilitate Latino student achievement?
- How would you describe your role in moving students to college?
- What would you say parents expect of your school?
- How does your school address these expectations?
- Where does your school fall short?

How long will I be in the research study?

Participation will take a total of about 30 minutes.

Are there any potential risks or discomforts that I can expect from this study?

There are no anticipated risks or discomforts.

Are there any potential benefits if I participate?

The results of the research may help to develop more Early College High School programs in the future.

Will information about me and my participation be kept confidential?

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of a self-assigned pseudonym during our discussion. This pseudonym will be used as our discussion is transcribed into text. The audio recording of our discussion will be destroyed once our discussion has been transcribed. Additionally, you will be able to review the transcript of our discussion at any time during the research.

What are my rights if I take part in this study?

- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.

Who can I contact if I have questions about this study?

• The research team:

If you have any questions, comments, or concerns about the research, you can talk to the one of the researchers. Please contact:

Principal Investigator	Faculty Sponsor
Kristen Beall	Dr. Christina Christie
(661)619-9578	(310)825-0432
krabarnes@gmail.com	tina.christie@UCLA.edu

• UCLA Office of the Human Research Protection Program (OHRPP):

If you have questions about your rights while taking part in this study, or you have concerns or suggestions and you want to talk to someone other than the researchers about the study, please call the OHRPP at (310) 825-7122 or write to:

UCLA Office of the Human Research Protection Program 11000 Kinross Avenue, Suite 211, Box 951694 Los Angeles, CA 90095-1694

You will be given a copy of this information to keep for your records.

SIGNATURE OF STUDY PARTICIPANT

Name of Participant	<u> </u>
Signature of Participant	Date
SIGNATURE OF PERSON OBTAINING	CONSENT
V (D 01)	
Name of Person Obtaining Consent	Contact Number
Signature of Person Obtaining Consent	Date

APPENDIX G:

STUDENT FOCUS GROUP PROTOCOL

Background/Get Acquainted Questions:

Tell me about yourself: How long have you attended this school? How many college hours do you have at this time? Will you be attending college in the fall? What do you plan to major in? How many siblings do you have? Are you the first one in your family to attend college?

Research Questions:

- 1. What initially attracts students to enroll in an ECHS program?
 - a) How did you hear about ECHS?
 - b) Tell me your story about why you chose this school.
 - c) Did anyone encourage/discourage your decision to attend ECHS? Why?
 - d) What qualities did you possess that prepared you for the rigor of college classes at such a young age?
- 2. What are the specific support systems within the school setting that motivate students to continue in an ECHS?
 - a) Can you share with me what you believe to be the most valuable thing you have gained from this ECHS?
 - b) How would you describe the relationship between this school's staff and students in the program?
 - c) How would you describe the relationship between this school's staff and the parents of students in the program?
 - d) Can you identify specific programs that have supported your success? AVID? STEM? Tutors? Career planning?
 - e) Is there any one thing that you would add or change about this program to better prepare you for college?
- 3. What successes and challenges have students experienced in high school as part of an ECHS program?
 - a) Talk to me about being able to maintain everyday life of high school and being a college student at the same time.
 - b) What challenges did you experience?
 - c) What successes did you experience?

- 4. What academic and personal successes have the students experienced by being a part of an ECHS program? (From the very beginning of the ECHS program, how was success determined? Who communicated to you what success would be and how you were to know if you were successful?)
 - a) As you entered into the ECHS program at the beginning of your freshman year, what successes did you expect to achieve?
 - b) Looking back on the past four years as an ECHS student, what is some evidence that you have been successful?
 - c) Did you maintain the same goals throughout this program? What were your goals at the beginning of the program?
 - d) Were your goals strengthened by your experience in the ECHS program? If so, what specific aspects of the program helped strengthen your goals?
 - e) Did this experience change your perspective of your personal outcomes?

Additional Questions:

If you had it to do over again, would you choose this school? Why?

What recommendations would you have for future students entering the program?

APPENDIX H:

STAFF INTERVIEW PROTOCOL

Opening Questions:

- 1. Tell me about your role at this ECHS.
- 2. How did you become a part of this ECHS?
- 3. In your opinion, what are the most important features of ECHS?
- 4. Why would you say students/parents select this school over neighboring high school options?

Implementing Early College High School Model:

- 5. Where has this school faced its greatest challenges?
- 6. Has this school changed since opening?
- 7. In terms of student supports:
 - a. What are the programmatic supports that are embedded within this school to facilitate student achievement?
 - b. What are the student-centered supports that are embedded within this school to facilitate student achievement?
- 8. Has consideration been given to specific systems to facilitate Latino student achievement?

Promoting College Participation:

- 9. How would you describe your role in moving students to college?
- 10. What keeps students from participating in college (enrolling in four-year institutions)?
- 11. Are those barriers the same or different for Latino students?
- 12. How has this school addressed those issues and concerns?

Staff Benefits and Challenges:

- 13. What are the benefits of working in an ECHS?
- 14. What are the challenges of working in an ECHS?
- 15. Do you have any advice for future ECHS programs?

APPENDIX I:

STUDENT QUESTIONNAIRE

Age	Date of Birth (Gender	Ethnicity	
Place of B	irth	Sta	ıte	Country
	our plans after graduation?			
Major(s) y	ou are considering			
Did your r	nother attend a college/university?	Yes	No	_
If yes, did	she graduate from a college/universi	ty? Yes	No	_
Did your f	ather attend a college/university?	Yes	No	_
If yes, did	he graduate from a college/universit	y? Yes	No	_
	ve family members (e.g., sibling(s), ntly attend or previously attended a c			sider close to you
			Yes	_ No
Language((s) primarily spoken at home:			
Favorite te	eachers at school:			
Other favo	orite adults at school:			

Extracurricular activities in which you participate:
Feel free to share anything else about your experiences at your high school that were or were not discussed in the focus group.
Feel free to share any other comments about your perceived challenges at your high school that were or were not discussed in the focus group.
Feel free to share any other comments about your support systems at your high school that were or were not discussed in the focus group.

References

- Abedi, J. (2002). Standardized achievement tests and English language learners: Psychometrics. *Educational Assessment*, 8(3), 231–257.
- Adelman, C. (1999). Anwers in the toolbox. Academic intensity, attendance patterns, and bachelor's degree attainment. Jessup, MD: U.S. Department of Education. Retrieved from http://files.eric.ed.gov/fulltext/ED431363.pdf
- Adelman, C. (2006). The toolbox revisited: Paths to degree completion from high school through college. Jessup, MD: U.S. Department of Education. Retrieved from http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED490195
- Alexander, K., Entwisle, D., & Olsen, L. (1997). *Children, schools & inequality*. Boulder, CO: Westview.
- Anderson, A. (2005). The community builder's approach to theory of change: A practical guide to theory and development. New York, NY: Aspen Institute Roundtable on Community Change.
- Andrews, H. (2004). Dual credit research outcomes for students. *Community College Journal of Research and Practice*, 28(5), 415–422.
- The Annie E. Casey Foundation. (2015). *The 2014 kids count data book*. Baltimore, MD: Author.
- Bandura, A. (1986). Social foundations of thought and actions: A social cognitive theory.

 Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (2nd ed., pp. 154–196). New York, NY: Guilford.

- Behnke, A. O., Gonzalez, L. M., & Cox, R. B. (2010). Latino students in new arrival states:

 Factors and services to prevent youth from dropping out. *Hispanic Journal of Behavioral Sciences*, 32(3), 385–409.
- Berger, A., Adelman, N., & Cole, S. (2010). The Early College High School Initiative: An overview of five evaluation years. *Peabody Journal of Education*, 85(3), 333–347.
- Berger, A., Turk-Bicakci, L., Garet, M., Knudson, J., & Hoshen, G. (2014). *Early college,*continued success: Early College High School Initiative impact study. Washington, DC:

 American Institutes for Research.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and findings* (pp. 9–25). Boulder, CO: Westview.
- California Assessment of Student Performance and Progress. (2015). 2015 test results for English language arts/literacy and mathematics. Sacramento, CA: California Department of Education. Retrieved from http://caaspp.cde.ca.gov/sb2015/
- California Community Colleges. (2012). *Doing what matters for jobs and the economy*.

 Retrieved from http://www.coeccc.net/documents/dwm_ag_sector_CA_12.pdf
- California Department of Education. (2015a). *Enrollment by ethnicity, State of California, 2014–2015*. Retrieved May 20, 2015, from http://dq.cde.ca.gov/dataquest
- California Department of Education. (2015b). 12th grade graduates completing all courses required for U.C. and/or C.S.U. entrance. Retrieved May 20, 2015, from http://data1.cde.ca.gov/dataquest
- California Department of Education. (2015c). *California High School Exit Exam (CAHSEE)*results for mathematics and English language arts. Retrieved May 20, 2015, from
 http://data1.cde.ca.gov/dataquest

- California Department of Education. (2015d). Suspension and expulsion rates, State of California, 2014–2015. Retrieved May 20, 2015, from http://dq.cde.ca.gov/dataquest
- California Department of Education. (2015e). *Truancy report, State of California*, 2014–2015.

 Retrieved May 20, 2015, from http://dq.cde.ca.gov/dataquest
- California Department of Education. (2015f). *SAT report, State of California*, 2014–2015.

 Retrieved May 20, 2015, from http://dq.cde.ca.gov/dataquest
- California Department of Education. (2015g). *Cohort outcome data, State of California, 2014— 2015.* Retrieved May 20, 2015, from http://dq.cde.ca.gov/dataquest
- California State University Office of the Chancellor. (2015). Early Assessment Program (EAP) for college readiness. 2015 EAP test results. Retrieved from http://eap.ets.org/
- Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education*requirements through 2020. Washington, DC: Georgetown University Center on

 Education and the Workforce. Retrieved May 20, 2015, from

 https://cew.georgetown.edu/reprt/recovery-job-growth-and-education-requirements-through-2020/
- Castillo, L. G., Conoley, C. W., Cepeda, L. M., Ivy, K. K., & Archuleta, D. J. (2010). Mexican American adolescents' perceptions of a pro-college culture. *Journal of Hispanic Higher Education*, 9(1), 61–72.
- Center for Theory of Change. (2016). *How does theory of change work?* Retrieved on February 20, 2016, from http://www.theoryofchange.org/what-is-theory-of-change/how-does-theory-of-change-work/
- Chmelynski, C. (2004). "Early college" high school jump-starts higher learning. *Education Digest*, 69(7), 1–5.

- Colby, S. L., & Ortman, J. M. (2014). *Projections of the size and composition of the U.S.* population: 2014 to 2060. Washington, DC: U.S. Census Bureau.
- Cowan, J., & Goldhaber, D. (2015). How much of a "running start" do dual enrollment programs provide students? *The Review of Higher Education*, 38(3), 425–460.
- DiMaria, F. (2013). The Early College High School Initiative. *Education Digest*, 79(1), 64–68.
- Ebaugh, H. R. (1988). *Becoming an ex: The process of role exit*. Chicago, IL: University of Chicago Press.
- Edmunds, J. A., Bernstein, L., Glennie, E., Willse, J., Arshavsky, N., Unlu, F., & Dallas, A. (2010). Preparing students for college: The implementation and impact of the early college model. *Peabody Journal of Education*, 85(3), 348–364.
- Edmunds, J. A., Willse, J., Arshavsky, N., & Dallas, A. (2013). Mandated engagement: The impact of Early College High Schools. *Teachers College Record*, *115*(7), 1–31.
- The Education Trust-West. (2016). *FAFSA and Cal Grant application rates*. Oakland, CA:

 Author. Retrieved from http://financialaid.edtrustwest.org/
- Edmunds, J. A., Unlu, F., Glennie, E., Bernstein, L., Fesler, L., Furey, J., & Arshavsky, N. (2016). Smoothing the transition to postsecondary education: The impact of the early college model. *Journal of Research on Educational Effectiveness*, http://www.tandfonline.com/loi/uree20.
- Employment Development Department. (2014). *California agricultural bulletin, 1st quarter*2014. Sacramento, CA: State of California. Retrieved from

 http://www.labormarketinfo.edd.ca.gov/file/agric/2014-1cab.pdf

- Employment Development Department. (2015, May 20). *California labor market review*.

 Sacramento, CA: State of California. Retrieved from

 http://www.labormarketinfo.edd.ca.gov/Publications/Labor-Market-Analysis/calmr.pdf
- Fischetti, J., MacKain, S., & Smith, R. (2011). Mr. Watson, come here: The performance of early college students in their first year at the university and the challenge to P–16 education. *Improving Schools*, 14(1), 48–64.
- Foster, K., & Nakkula, M. (2005). *Igniting and sustaining educational identity development:*Findings from two Early College High Schools. Boston, MA: Jobs for the Future.
- Fry, R. (2008). *Latino settlement in the new century*. Washington, DC: Pew Research Center.

 Retrieved from http://www.pewhispanic.org/2008/10//22/latinos-account-for-half-of-us-population-growth-since-2000
- Fry, R., & Lopez, M. H. (2012). Hispanic student enrollments reach new highs in 2011.
 Washington, DC: Pew Research Center. Retrieved from
 http://www.pewhispanic.org/2012/08/20/hispanic-student-enrollments-reach-new-highs-in-2011
- Gándara, P. (2009). Progress and stagnation: 25 years of Hispanic achievement. *Diverse*, 26(9), 37–38.
- Gándara, P. (2010a). Overcoming triple segregation. Educational Leadership, 68(3), 60–64.
- Gándara, P. (2010b). The Latino education crisis. *Educational Leadership*, 67(5), 24–30.
- Gándara, P. (2011). Addressing root causes of the achievment gap for California's Latino youth (Research Brief no. 3). San Francisco, CA: California Healthy Students Research Project.
- Gándara, P. (2015). With the future on the line: Why studying Latino education is so urgent.

 American Journal of Education, 121(3), 451–463.

- Gándara, P., & Aldana, U. S. (2014). Who's segregated now? Latinos, language, and the future of integrated schools. *Educational Administrative Quarterly*, 50(5), 735–748.
- Gándara, P., & Contreras, F. (2009). *The Latino eduation crisis: The consequences of failed social policies*. Cambridge, MA: Harvard University Press.
- Gloria, A. M., Castellanos, J., & Orozco, V. (2005). Percieved educational barriers, cultural fit, coping responses, and psychological well-being of Latina undergraduates. *Hispanic Journal of Behavioral Sciences*, 27(2), 161–183.
- Gonzales, R. G. (2010). On the wrong side of the tracks: Understanding the effects of school structure and social capital in the educational pursuits of undocumented immigrant students. *Peabody Journal of Education*, 85(4), 469–485.
- Gonzalez, L. M. (2015). Barriers to college access for Latino/a adolescents: A comparison of theoretical frameworks. *Journal of Latinos & Education*, *14*(4), 320–335.
- Gonzalez, N. A., Knight, G. P., Morgan-Lopez, A., Saenz, D., & Sirolli, A. (2002).

 Acculturation and the mental health of Latino youths: An integration and critique of the literature. In J. M. Contreras, K. A. Kerns, & A. M. Neal-Barnett (Eds.), *Latino children and families in the United States* (pp. 45–74). Westport, CT: Greenwood.
- Hall, A. (2013). Program implementation and student outcomes at four western North Carolina
 Early College High Schools: A study synopsis. *Community College Journal of Research* & Practice, 37(9), 677–690.
- Hoffman, N. (2005). Add and subtract: Dual enrollment as a state strategy to increase postsecondary success for underrepresented students. Boston, MA: Jobs for the Future. Retrieved from http://www.jff.org/publications/add-and-subtract-dual-enrollment-state-strategy-increase-postsecondary-success

- Hoffman, N., Vargas, J., & Santos, J. (2009). New directions for dual enrollment: Creating stronger pathways from high school through college. *New Directions for Community College*, *145*, 43–58.
- Howley, A., Howley, M. D., Howley, C. B., & Duncan, T. (2013). Early college and dual enrollment challenges: Inroads and impediments to access. *Journal of Advanced Academics*, 24(2), 77–107.
- Jacobson, S. (2005). The recruitment and retention of school leaders: Understanding administrator supply and demand. In N. Bascia, A. Cumming, A. Datnow, K. Leithwood,
 & D. Livingstone (Eds.), *International handbook of education policy* (pp. 457–470).
 London, England: Flower Press.
- Jobs for the Future. (2015). *Early college designs*. Boston, MA: Author. Retrieved from http://www.jff.org/initiatives/early-college-designs
- Jones, S. (2014). Student participation in dual enrollment and college success. *Community College Journal of Research and Practice*, 38(1), 24–37.
- Kaniuka, T. S., & Vickers, M. (2010). Lessons learned: How Early College High Schools offer a pathway for high school reform. *NASSP Bulletin*, *94*(3), 165–183.
- Karp, M. (2007). Learning about the role of a college student through dual enrollment participation. New York, NY: Community College Research Center.
- Karp, M. M., Bailey, T. R., Hughes, K. L., & Fermin, B. (2005). *Update to state dual enrollment policies: Addressing access & equity*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education.
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). The postsecondary achievement of participants in dual enrollment: An analysis of student

- outcomes in two states. St. Paul, MN: National Research Center for Career and Technical Education.
- Kena, G., Musu-Gillette, L., Robinson, J., Wang, X., Rathbun, A., Wilkinsons-Flicker, J. Z., . . . Dunlop Velez, E. (2015). *The condition of education*. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/programs/coe/indicator_caa.asp
- Kimura-Walsh, E., Yamamura, E. K., Griffin, K. A., & Allen, W. R. (2009). Achieving the college dream? Examining disparities in access to college information among high achieving and non-high achieving Latina students. *Journal of Hispanic Higher Education*, 8(3), 298–315.
- Kisker, C. (2006). Integrating high school and the community college. *Community College Review*, *34*(1), 68–86.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79–122.
- Lent, R. W., Brown, S. D., & Hackett, G. (1999). A social cognitive view of school-to-work transition. *The Career Development Quarterly*, 47, 297–311.
- Lewis, K., & Burd-Sharps, S. (2014). *A portrait of California*. Brooklyn, NY: Social Science Research Council.
- Locke, L. A., Stedrak, L. J., & Eadens, D. (2014). Latina students, an Early College High School, and educational opportunity: A case study. *Journal of Cases in Educational Leadership*, 17(1), 59–71.

- Lopez, E. J., Ehly, S., & Garcia-Vazquez, E. (2002). Acculturation, social support, and academic achievement of Mexican and Mexican American high school students: An exploratory study. *Psychology in the Schools*, *39*(3), 245–257.
- Lopez, M. H. (2009). *Latinos and education: Explaining the attainment gap*. Washington, DC: Pew Research Center. Retrieved from http://pewhispanic.org/reports/report.html
- Lutz, A. (2007). Barriers to high-school completion among immigrant and later-generation

 Latinos in the USA: Language, ethnicity, and socioeconomic status. *Ethnicities*, 7, 323–342.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.
- McDonald, D., & Farrell, T. (2012). Out of the mouths of babes: Early college high school students' transformational learning experiences. *Journal of Advanced Academics*, 23(3), 217–248.
- McMillan, J. H., & Schumacher, S. (2009). *Research in education: Evidence-based inquiry* (7th ed.). Upper Saddle River, NJ: Pearson.
- Mechur Karp, M. (2012). "I don't know, I've never been to college!" Dual enrollment as a college readiness strategy. *New Directions for Higher Education*, 158, 21–28.
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation* (3rd ed.). San Francisco, CA: Jossey-Bass.
- Miller, V. M., Fleming, R., & Reed, S. (2013). Mapping the early college research literature.

 Community College Journal of Research and Practice, 37(9), 664–676.

- Moore, G. W., Slate, J. R., Edmonston, S. L., Combs, J. P., Bustamante, R., & Onwuegbusie, A. J. (2010). High school students and their lack of preparedness for college: A statewide study. *Education & Urban Society*, 42(7), 817–838.
- Murphey, D., Guzman, L., & Torres, A. (2014). *America's Hispanic children: Gaining ground, looking forward*. Bethesda, MD: Child Trends.
- National Center for Education Statistics. (2014). *Table 302.20. Percentage of recent high school completers enrolled in 2- and 4-year colleges, by race/ethnicity: 1960 through 2013*.

 Retrieved Dec 15, 2015, from

 http://nces.ed.gov/programs/digest/d14/tables/dt14_302.20.asp
- National Center for Education Statistics. (2015). Table 1. Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographics for the United States, the 50 states, and the District of Columbia: School year 2013–14.

 Retrieved May 22, 2016, from https://nces.ed.gov/ccd/tables/ACGR_RE_and_characteristics_2013-14.asp
- O'Donnell, K. (2008). Parents' reports of the school readiness of young children from the

 National Household Education Surveys Progam 2007 (NCES 2008-051). Washington,

 DC: National Center for Education Statistics.
- Ojeda, L., Flores, L. Y., Meza, R. R., & Morales, A. (2011). Culturally competent qualitative research with Latino immigrants. *Hispanic Journal of Behavioral Sciences*, *33*(2), 184–203.
- Ongaga, K. O. (2010). Students' learning experiences in an Early College High School. *Peabody Journal of Education*, 85(3), 375–388.

- Orfield, G., & Ee, J. (2014). Segregating California's future: Inequality and its alternative 60 years after Brown v. Board of Education. Los Angeles, CA: The Civil Rights

 Project/Proyecto Derechos Civiles.
- Orfield, G., & Frankenberg, E. (2014). *Brown at 60: Great progress, a long retreat, and an uncertain future*. Los Angeles, CA: The Civil Rights Project/Proyecto Derechos Civiles.
- Ortiz, C. J., Valerio, M. A., & Lopez, K. (2012). Trends in Hispanic academic achievement: Where do we go from here? *Journal of Hispanic Higher Education*, 11(2), 136–148.
- Ryan, C. L., & Bauman, K. (2016). Educational attainment in the United States: 2015.

 Washington, DC: U.S. Census Bureau. Retrieved from

 https://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf
- Schensul, J. J., LeCompte, M. D., Nastasi, B. K., & Borgatti, S. P. (1999). Enhanced ethnographic methods: Audiovisual techniques, focused group interviews, and elicitation techniques. Walnut Creek, CA: AltaMira.
- Speroni, C. (2011a). High school dual enrollment programs: Are we fast-tracking students too fast? (NCPR Working Paper). New York, NY: National Center for Postsecondary Research.
- Speroni, C. (2011b). Determinants of students' success: The role of advanced placement and dual enrollment programs. New York, NY: National Center for Postsecondary Research.
- Swanson, J. (2008). An analysis of the impact of high school dual enrollment courses. Iowa City, IA: University of Iowa, Institute for Research and Policy Acceleration.

- U.S. Census Bureau. (2015). Annual estimates of the resident population by sex, age, race, and Hispanic origin for the United States and states: April 1, 2010 to July 1, 2014. Retrieved May 20, 2016, from http://factfinder.census.gov
- U.S. Department of Agriculture Economic Research Service. (2015). Retrieved December 15, 2015, from http://www.ers.usda.gov
- Vargas, J. J., Roach, R., & David, K. M. (2014). Successful concurrent programs: An EXCELerate program in Oklahoma. *Community College Journal of Research & Practice*, 38(2/3), 166–173.
- Young, R. D., Jr., Slate, J. P., Moore, G. W., & Barnes, W. (2014). Dual credit programs: A conceptual analysis of the literature. *Journal of Educational Research*, 8(1/2), 79–106.
- Young, J. W., Lakin, J., Courtney, R., & Martiniello, M. (2012). Advancing the quality and equity of education for Latino Students: A white paper. Princeton, NJ: Educational Tetsing Service.