

DENIAL OF ACCESS: THE IMPACT OF LINKED LEARNING/
CALIFORNIA PARTNERSHIP ACADEMIES IN PREPARING
ENGLISH LANGUAGE LEARNERS TO BECOME COLLEGE AND
CAREER READY FOR POSTSECONDARY OPPORTUNITIES

by

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A Dissertation

Submitted in Partial Fulfillment of the Requirements for the Degree

Doctorate in Education

Doctoral Program in Educational Leadership for Social Justice

California State University, East Bay

2016

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Abstract

Currently in public education we are experiencing a pendulum swing of federal and state reform mandates that will align to the upcoming Common Core State Standards (CCSS) implemented in 2015. With the reauthorization of the Elementary and Secondary Education Act (ESEA) in 2013, the shift changed from the high stakes testing of No Child Left behind (NCLB) to the inclusion of college and career readiness standards for all students.

This study identified the impact of federal and state reform mandates on underserved students, specifically Long-Term English Language Learners (LT-ELL). In addition, this research study investigated if ELL students are accessing Linked Learning College and Career Readiness Pathways to achieve the goals of the Common Core State Standards of being college and career ready. In the past, LT-ELL students have been unsuccessful in accessing quality core and technical curriculum that is college and career specific and provides the outcomes for successful transition to postsecondary education and/or career options. This study found that LT-ELL students continue to experience exclusionary practices and lack of access to Linked Learning/California Partnership Academy Pathways.

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ACKNOWLEDGEMENTS

I would like to thank the important people who have helped me accomplish this journey. First, thank you to my wife Theresa. Her unconditional love, support, and understanding helped me stay focused and on task during these past few years. I thank my big Sis Gloria for always believing in me and supporting me throughout my life. Thank you to our children, Lucia, Aldo, Rebecca and Olivia for being such wonderful people. A heartfelt thank you to my 93 year old mother, Benita, who has always been extremely supportive and encouraging as I strive for my goals.

A special thank you to my dissertation committee chaired by Dr. Gregg Jorgensen and committee members Dr. Elizabeth Brooke-Garza and Dr. Emily Brizendine. I am extremely grateful to the dissertation committee for their support and guidance throughout this process.

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CHAPTER ONE

INTRODUCTION

Currently public education is experiencing a shift in federal and state reform mandates from the high stakes testing of No Child Left Behind (NCLB) to the implementation of the Common Core State Standards (CCSS) in 2015. The CCSS emphasize that all students are to be college and career ready in order to access postsecondary opportunities (Conley, 2011). This study identified the impact of federal and state reform mandates on underserved students of color, specifically Long-Term English Language Learners (LT-ELL). In addition, this research study investigated if English Language Learners (ELL) are accessing Linked Learning/California Partnership Academy (LL/CPA) college and career readiness pathways to achieve the goals of the CCSS of being college and career ready.

LT-ELL students have been unsuccessful in accessing quality core and technical curriculum that is college and career specific and provides the outcomes for a successful transition to postsecondary education and/or career options (Olsen, 2010).

Background

The CCSS asks students to demonstrate their knowledge of English Language Arts (ELA) and Math as a performance assessment task rather than as a single content assessment that the NCLB had required. This research study illustrated the complexity that ELL students face as they strive to acquire English language proficiency while

enrolled in English Language Development (ELD) courses at the secondary level. Based on their limited English language proficiency, ELL students perform below their English-speaking peers on the mandated CCSS test, as well as below the scores of Initially Fluent English Proficient (IFEP) and Reclassified Fluent English Proficient (RFEP) students. However, this performance may reflect low English proficiency rather than low content knowledge (Jepsen & de Alth, 2005).

Purpose of the Study

The conflict for ELL students is that they are caught between the paradoxes of how school districts implement Title III Limited English Proficiency (LEP) student program funds and how the needs for supplementary services for LEP students are addressed. Title III funding provides resources to address the LEP students' educational needs as they acquire English proficiency. Mastering English language development acquisition skills is critical for ELL students to acquire English language proficiency. Mastery of academic language is arguably the single most important determinant of academic success for individual students (Francis, Rivera, Lesaux, Kieffler, & Rivera, 2006, p. 7). The lack of proficiency in academic language in English impacts ELL students' ability to comprehend and analyze texts in middle and high school, affects their ability to write and express themselves effectively, and hampers their acquisition of academic content in all academic areas, including mathematics (Francis et al., 2006).

Districts use various approaches to ELD. One intervention strategy is offering ELD by blocking or doubling up on the ELD courses. In such a setting, ELL students take up to two ELD classes in lieu of one English class. In addition, students who scored far below basic on the California Standards Test (CST) in Reading/Language Arts and Math

were placed into intensive or strategic intervention classes (CST assessment has been changed to Smarter Balance Assessment Consortium as of 2014).

Olsen (2010) stated that in California, a student who scores below grade level (testing Far Below Basic-Tier 3) on Reading/Language Arts of the CST is often assigned to Intensive intervention classes. The classes include both English Learners and native English speakers. For English Learners, this takes the place of ELD (Olsen, 2010, p. 29). This emphasizes the paradox of practice for ELL students who are placed in intervention classes due to underperforming academic scores on the CST. In addition, ELL students are placed into ELD to learn English language skills. The results remain that ELL students are not accessing core academic courses or electives.

Another impact for ELL students is that their school schedules tend to be filled with ELD, intervention and support classes, and math. In Table 1, a random example of an ELD 2 and ELD 3 class schedule at USA High School (USA High), a pseudonym, shows a consistent pattern of ELD, intervention, and math classes.

Student	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6
Student A –10 th grade-Female ELD 3	Jazz	ELD 3A	Geometry	Construction Tech	US History	Beginning Art
Student B- 10 th grade Male ELD 1-2	ELD 1A	ELD 1B	Geometry	ELD 2A	US History	Beginning Art

PowerSchool-student information system, USA High School-Fall 2014

Table 1: Random Sample of Class Schedule

The ELD classes in many school districts do not receive university approved “a-g” credit. A-G credits mean that students must successfully pass the minimum

of 15 University of California (UC) approved courses in various subjects. Courses from California high schools and online schools are used to satisfy the “a-g” subject requirements that must be approved by the UC and appear on the institution’s “a-g” course list. These courses are to be academically challenging, involve substantial reading and writing, include problems and laboratory work (as appropriate), show serious attention to analytical thinking and factual content, and improve development of students’ oral and listening skills (University of California, 2014). The UC system allows no more than one year of English Second Language (ESL) / ELD courses to satisfy the English (“b”) subject requirement (University of California, 2014). LT-ELL students who remain in ELD based on their California English Language Development Test (CELDT) scores cannot earn the four years of English credits necessary for college preparation (Olsen, 2010).

Impact of Federal Educational Policies

In 1983, the National Commission on Excellence in Education released *A Nation at Risk*, a report on the condition of America’s schools (National Commission on Excellence in Education, 1983). This report had a significant impact on federal legislation and subsequent policies. It condemned American educational systems for their failure to produce significant numbers of students who achieved high scores on standardized measures of core subjects such as mathematics and science.

In a study about the effect of NCLB on school districts, the Center on Education Policy (2006) found that 71% of school districts reported reducing instructional time in non-core content areas. Schoen and Fusarelli (2008) also found evidence of narrowing the curriculum and teaching to the test. As a response to NCLB, states adopted state-approved core curriculum and intervention programs to narrow the achievement gap

of significant subgroups of students. Achievement gap refers to the differences in scores on state or national achievement tests between various student demographic groups (Anderson, Medrich, & Fowler, 2007, p. 547). Federal dollars provide funds to implement the mandates of Title 1 and Title 111. These allow educational programs to narrow the achievement gap between subgroups. The result was that schools narrowed the curriculum because they were under considerable pressure to show Adequate Yearly Progress (AYP) in reading and math.

In 2010, a number of states across the nation adopted consistent standards under the CCSS for English and math. The California Department of Education (CDE, 2010) claimed that having the same standards helps all students receive a good education, even if they change schools or move to a different state. Teachers, parents, and education experts designed the CCSS to prepare students for success in college and the workplace (California Department of Education, 2010). The California CCSS for ELA/Literacy are organized around a number of key design considerations. The College and Career Readiness anchor standards constitute the backbone of the standards and define the general, cross-disciplinary literacy expectations for students in preparation for college and the workforce.

College and Career Readiness

Preparing students to be both college and career ready creates a challenge for schools. According to Conley (2014), the challenge is how school responses will have a profound effect not only on students, but also on the economic and social future of the nation as a whole (p. 20). The Educational Policy Improvement Center (EPIC) conducted a national study of the CCSS in 2011, to determine the degree to which these standards contained the knowledge and skills students needed to be ready for a wide range of

postsecondary courses. The study suggested that college and career readiness share many important elements. Beyond the content knowledge that is common across a range of programs, the elements shared most consistently are the learning skills all students need to be ready for a variety of postsecondary learning environments. These learning skills are study skills, such as time management, goal orientation, persistence, and ownership of learning (Conley, Drumond, De Gonzalez, Rooseboom, & Stout, 2011). College and career readiness creates an acknowledgement that not all students are going to follow the same path to college and career readiness. Secondary programs of study need more opportunities for students to match what they are learning based on their aspirations, interests, and ambitions. The stated aim of the CCSS is to define the knowledge and skills students should acquire in order to graduate from high school ready to succeed in entry-level, credit-bearing academic college courses and in workforce training programs (Common Core State Standards Initiative, 2010). This aim is particularly important for high school LT-ELL students who need to access college and career readiness skills (Conley, 2014; Olsen, 2010) in their program of study where their interest, aspirations, and engagement are integrated in their learning. A perfect merger may be on the horizon as the CCSS are being designed to include college and career anchor standards within the core content. Career academies are designed to integrate core content courses with a career/technical course centered on an industry sector. This integration of core and career/technical themed courses provides students with opportunities to refine their career readiness skills as they participate in work-based learning.

Conflict of Academic/Intervention Course of Study and Support

The California Department of Education's CELDT Information Guide (2013a) states that under current state law, Education Code (EC) section 313, students identified

as ELL must participate in the annual administration of the CELDT until they are reclassified into RFEP.

The Lead Educational Agency (LEA) criteria are measured against an empirically established range of performance in basic skills based upon the performance of English proficient students of the same age. This demonstrates whether the student is sufficiently proficient in English to participate effectively in a curriculum designed for students of the same age whose native language is English (CDE, 2013a, p. 18). Currently, NCLB policy expects school districts to increase the rate of reclassification while maintaining the mandates of high standards for English language performance on standardized tests measuring both English proficiency and academic achievement (Jepsen & de Alth, 2005). One strategy to support secondary level ELL 1 and 2 students in acquiring English proficiency could be to double or triple ELD course offerings to provide interventions. However, researchers have found that ELL students were being excluded from accessing college and career programs of study that integrate core content and career technical courses. Conchas studied career academies in Southern California and found that both of the programs under review did not enroll any students who were classified as LEP in spite of the school's population having 18% LEP student enrollment (Conchas, 2001, p. 292). Justification for not enrolling LEP students was that students were expected to read and write fluently in English. This supports the notion that ELL students at the three beginning levels of the CELDT results (beginning, beginning intermediate, and intermediate) could be impeded from accessing career academies. This raises the possibility that the issue of access may lead to LT-ELL students at the secondary level not completing the graduation requirements or participating in career academies. Also, the increasing number of large urban school districts adopting California State University (CSU) and UC "a-g" graduation requirements to meet the college entrance admissions can pose barriers for ELL students (Betts, Zau, & VolzBachofer, 2013).

English Language Barriers

Engagement factors of secondary level students need to be taken into consideration and evaluated to determine how students with diverse learning needs can access quality education. Olsen (2010) claimed that LT-ELL students who had yet to be reclassified as English proficient were losing ground towards meeting graduation credits due to their ELD course requirements. English proficiency is important for success in the rapidly growing high-skill, high-wage, and high-demand labor market (Gonzalez, 2000; Trejo, 2003). Since the labor platform for accessing high-skill and high-wage employment is centered on communication skills, Saunders (2013) claimed that ELL students needed to access programs that emphasized the practical use of academic learning. Although, other factors (e.g., motivation, persistence, engagement, and quantitative skills) play important roles in the learning process. The role that language plays in determining student success with academic content cannot be overemphasized. Francis, Rivera, Lesaux, Kieffler, and Rivera (2006) maintained that proficient use of—and control over—academic language is the key to content-area learning.

ELD instruction is designed to promote the simultaneous development of content knowledge and advanced levels of English. The California ELA/ELD Framework (California Department of Education, 2014a) defines ELD instruction and the CA ELD standards in two ways. First, Integrated ELD in which all teachers with ELL students in their classrooms use the CA ELD Standards in tandem with the focal CA CCSS for ELA/Literacy and other content standards. Second, Designated ELD, or a protected time during the regular school day in which teachers use the CA ELD Standards as the baseline to build from content instruction in order to develop the critical language ELL students need for content learning in English (California Department of Education, 2014a, p. 79). As each school district implements the ELA/ELD programs based on the framework,

ELL students in CELDT levels 1, 2, or 3 are to be placed appropriately in Integrated and Designated ELD courses so they can master the use of the English language.

Conceptual Framework

The conceptual framework used in this study provides a foundation to analyze the implications of the LL/CPA pathways on high school ELL students in accessing college and career readiness standards. In order to understand the complexities of how ELL students could access college and career readiness standards, the conceptual framework used for this dissertation is student engagement and optimism-based social capital. It is proposed that the implementation of Linked Learning strategies can provide a link to both student engagement and optimism-based social capital for high school students who are ELL. The underpinning of this study is the inter-relationship of two conceptual frameworks (a) from Conchas's (2001) on Latino student engagement, and (b) from Stanton-Salazar's work (1997) on optimism-based social capital. The implementation strategies explored using these two concepts addressed the interconnectedness and opportunities of how ELL students are achieving the goals of the CCSS to become college and career ready.

Conchas (2001) illustrated that institutional mechanisms have a direct effect on Latino school engagement. Institutional mechanisms are the schools' system of actors (teachers, administrators, etc.) that function within a school system to either construct school failure or success among low-income Latino students. According to Stern, Dayton, and Raby (2000) career academy teachers act as institutional agents that foster and support social networking among students. Appleton, Christenson, Kim, and Reschly (2006) indicated that since school personnel cannot alter family circumstances (e.g., income and mobility) other variables, including those related to the development of

students' perceived competence, personal goal setting, and interpersonal relationships offer students optimism for positive networking with peers (e.g., Floyd, 1997; Worrell & Hale, 2001). Specialized programs such as Advancement via Individual Determination (AVID) and career academies provide a supportive learning environment, especially for Latino and African-American youth. Mehan, Villanueva, Hubbard, Lintz, and Okamoto (1996) refer to social scaffolding as the institutional support system of programs.

Optimism-Based Social Capital and Student Engagement

This research study explores how Optimism-Based Social Capital Theory is utilized to identify student engagement (Stanton-Salazar, 1997) and other attributes that build and sustain peer networks. Social capital impacts peer connectedness, which may add capacity to ELL students (Ream 2005) in establishing social networks. Stanton-Salazar and Dornbusch (1995) further support that Latino student engagement is fostered in networks within a school as a source of social and cultural capital. Social Capital Theory is important in this study to determine which variables contribute to peer connectedness for ELL students in accessing and participating in LL/CPA pathways. Supporting research indicates that peer networks add value to student persistence and increases student engagement.

However, in examining previous research little qualitative data has been found to support the relationship between LT-ELL students participating in a career academy and student engagement. This research study measured the perceptions, beliefs, knowledge, and skills of two sets of LT-ELL students. One group classified as ELD 5, or RFEP was recruited to participate in the LL/CPA pathways. Another group classified as ELD 1-4 was excluded from participation due to language barriers. This research identifies the

need to minimize the sub-division of LT-ELL students and provide all ELL students with college and career readiness.

The following research questions were designed to gather evidence to determine if ELL students are accessing LL/CPA pathways to achieve the goals of CCSS of being college and career ready. They further investigate how student engagement and optimism-based social networking contribute to successful participation and completion of LL/CPA pathways.

Research Question

At the high school level, LT-ELL students have to take courses to acquire English language proficiency that could impact participation in LL/CPA pathways that provide access to college and career postsecondary options.

1. What factors affect LT-ELL students in accessing college and career readiness programs?
 - a. How do Linked Learning/California Partnership Academy Pathways provide access to college and career readiness for English Language Learners?
 - b. Do Linked Learning/California Partnership Academy Pathways provide engagement, support, and a sense of belonging for English Language Learners, and if so, in what ways?

CHAPTER 2

LITERATURE REVIEW

Introduction

This literature review is organized around four themes that illustrate the impact of educational practices, policies and procedures on LT-ELL students. It shows that they are either impeded or supported in accessing LL/CPA pathways toward the goals of CCSS of being college and career ready for postsecondary options. The first area of scholarship reviewed how the federal and state educational policies impact LT-ELL students. Second, a thorough review was made of the ELA policies and procedures that provide English language proficiency for ELL students. Third, this literature review examined the impact of the NCLB Act on LT-ELL students. The re-authorization of the Elementary Secondary Education Act (ESEA) focuses on college and career anchor standards that are embedded in the CCSS. Finally, this literature review explored if LT-ELL students are provided access to the LL/CPA pathways to become college and career ready.

Impacts of Federal Educational Policies

Bilingual Education Act

Federal policy for language minority students began with the Bilingual Education Act (BEA) in 1968. Stewner-Manzanares (1988) cited that the BEA was created out

of recognition of the dismal educational attainment of LEP students and the failure of schools to address the linguistic, cultural, and educational needs of this rapidly growing student population. To gain another perspective on how educational policies have been bantered around, it is important to investigate how Title VII of the ESEA and the BEA has impacted second language learners (Stewner-Manzanares, 1988). The historical journey of bilingual education has been plagued with politics since the inception of the BEA passed by Congress in 1968. Crawford (1989) demonstrated that various states passed propositions to make English the sole language taught in schools. Proposition 227 requires that “all children in California public schools shall be taught English by being taught in English” (Gandara et al., 2000, p. 2). The statute prohibits most uses of native-language instruction for LEP students and prescribes programs of “sheltered English immersion during a temporary transition period not normally intended to exceed one year” (Crawford, 1989, p. 60). From its inception, the BEA was unclear regarding how non-English speaking students would receive educational support to be successful in school. Based on reports from 1994 to 1995, of 48 states and the District of Columbia, the U.S. Department of Education estimated that 3,018,042 students in public and private K-12 schools were LEP (Macias & Kelly, 1996). In addition, Macias and Kelly (1996) stated that information about the educational services provided to LEP children is fragmentary at best.

In 1974, the United States Supreme Court ruling in *Lau v. Nichols* (1974) set the stage for states to provide appropriate language accommodations to safeguard the fundamental rights of LEP students. The United States Office of Education adopted *Lau v. Nichols* as the mandate for bilingual education and states had to develop a remediation plan to offer bilingual education to students without compromising the civil rights of LEP students. Bilingual education suddenly became a point of conflict between federal authorities and local school boards. This in turn created a financial burden on

school districts and an anti-bilingual backlash (Gutiérrez et al., 2002). Crawford (1989) described that the political paradox of bilingual education might have remained a marginal experiment had it not been imposed on school districts via the Lau Remedies and assorted court orders. At the same time however, federal and state mandates for bilingual education provoked a backlash and a fierce debate over the program's effectiveness. Critics charged that however "well-intentioned," Title VII had failed to fulfill its promises citing the persistence of high failure and dropout rates among Latino students in particular. Thus, its value as a civil rights remedy had come into question (Crawford, 1989, p. 59).

Impact of Federal Education Reform Initiatives

As the United States was competing in the global market for information-based technologies, school leaders were faced with challenges of how to reform education to actively prepare students for the high-skills workforce needed to maintain a competitive edge in the global market in an information-based society. In 1983, The National Commission for Excellence was commissioned by the Secretary of Education to review the current educational conditions of American Public Schools. The Commission released its findings in the report, *A Nation at Risk* (National Commission on Excellence in Education, 1983), which stated that technologically Japan had surpassed America. According to Schoen and Fusarelli (2008), school leadership was caught in a dilemma of developing innovative programs such as the twenty-first century schools model and responding to federal mandates to improve schools. "The 21st-century schools movement is an effort by educators, business leaders, and policy makers to inculcate children with the essential skills necessary for success in a rapidly changing, technology-driven society" (Schoen & Fusarelli, 2008, p. 185).

According to Daggett (2008) the inference was that Japan's technological advancements and those of other competitive nations could result in America being surpassed economically on a global scale. In addition, the *A Nation at Risk* report implied that the United States could be at risk in terms of national security due to the advancement of technological capacity of other countries (Knight & Erlandson, 2003). In an attempt to embrace excellence and equity for all students, national attention on non-English-speaking children and their families was reflected in high profile national reports such as *A Nation at Risk*, Goals 2000, and the Commission for Hispanic Americans 2000 (The White House Initiative on Educational Excellence for Hispanic Americans, 2000; United States Department of Education, 2000). These reports all shared a common theme that ELL students were not demonstrating proficiency in English. The paradigm shift was radically made that all students, regardless of primary home language and culture, be taught in English only and tested in standardized English. According to Gutiérrez et al. (2002) the elimination of the students' home language from the learning process had profound and negative consequences on teaching the literacy skills (Olsen, 2010) needed to be a productive and literate citizen in the twenty-first century.

In order to understand the challenges of implementing the CCSS and assessments, and uncover the impact on ELL students, a review of NCLB is needed. Since 2001, the federal educational initiative NCLB Act (United States Department of Education, 2001) has required states to monitor and improve student subgroups performance and issue publicly accessible report cards for all schools (Abedi, 2004). NCLB defines 10 student groups. These include all students, five ethnic groups (American Indian, Asian, Hispanic, Black, and White), Limited English Proficient, Special Education, Migrant Status, and Free and Reduced Priced Lunch. NCLB requires states to develop a set of high-quality, yearly student academic assessments that include, at a minimum, assessments in reading/ language arts, mathematics, and science. Each year they must report student AYP in

terms of percentage of students scoring at the proficient level or higher. Only the scores of subgroups with 20 or more students are used to calculate AYP, with the exception of Special Education and Limited English Proficiency, which must have at least 40 students (Office of Elementary and Secondary Education, 2006, p. 25).

Since the implementation of NCLB, the mandates had increased their focus on academic achievement in meeting AYP on standardized tests in mathematics and ELA; this narrowed the curriculum and decreased opportunities for students to take vocational or elective courses that might be more relevant to them (Jerald, 2006).

Many school districts focused on addressing the implementation of mandates to meet the AYP growth targets as prescribed by the NCLB. In addition, the growth progress was determined by the students' performance on the previous year high-stakes test results. According to Labaree (2007) "pressure to produce proficient students leads school districts, and schools to align both the formal curriculum at the district level and the curriculum in use by teachers at the classroom level with state and federal guidelines" (p. 14).

Due to the pressures of high-stakes testing in English and math, the mandates resulted in creating a fear factor of sanctions (Schoen & Fusarelli, 2008) for schools and school districts if student achievement indicators of AYP were not met. Schools are required, under threat of strict sanctions, to raise achievement each year in math and reading and to eliminate the achievement gap by race, ethnicity, language, and special education status (Lee, 2006). Continued failure to meet performance targets will eventually lead to sanctions such as school restructuring and possibly even closure (Crawford, 2004). The contradiction of reliance on NCLB and high-stakes testing to reform education creates a high-threat work environment for educators that do not favor risk taking behaviors and experimentation needed to bring about innovative school reform practices (Cawelti, 2006; Hagel & Brown, 2002). As Schoen and Fusarelli (2008)

indicated, high-stakes testing was the cornerstone of NCLB and schools were held accountable to produce academically proficient students in ELA and mathematics (Abedi, Hofstetter, & Lord, 2004).

While it is apparent that the NCLB framer's intention was to improve the performance of subgroups of students who have lagged behind academically for many years, they may not have anticipated the undue test performance pressure on schools with large number of targeted students. This is especially unrealistic when schools may still be struggling with the same limited school resources as before the implementation of NCLB. Test performance pressure may still be a reality in spite of any extra resources NCLB provides to prevent achievement gaps (as part of both Titles I and III). For many school districts the emphasis was to address how these mandates were to be implemented to meet the AYP growth scores.

Title III funding provides federal money to the state and school districts for ELL and immigrant student educational services (Jepsen & de Alth, 2005). These supplementary services include ELD instruction, enhanced instruction in the core academic subjects, and high-quality professional development for teachers and other staff (California Department of Education, 2014a). Supplemental Educational Services (SES) encompasses additional academic instruction/services that could include tutoring, remediation, and other supplemental academic enrichment services. The impact for students is that these services are offered after the regular instructional programs and by other individuals or outside school organizations that students are not familiar with at their school. Forte (2010) further emphasized that these strategies separated students from schools rather than promote school improvement as a means of improving student achievement. According to the description provided in the CDE, ELA/ELD framework (2014a), school districts have implemented various strategies to support the ELL student's acquisition of English language and these considerations include: modifying

the school schedule, grouping students together by similar language abilities, curriculum materials, instructional practices, and intervention strategies (California Department of Education, 2014a). As described by the ELA/ELD Framework, districts could implement a variety of strategies to meet the academic needs of students.

According to Olsen (2010), underperforming ELL students are often provided additional intervention courses to support the improvement of their academic achievement levels in ELD, English, and math. Benchmark or grade ready students received grade level course offerings and access to the full curriculum. For the intensive and strategic students, access to the core curriculum has been limited or does not occur until students test out of the two lower achievement bands of intensive or strategic. According to Olsen (2010), a typical high school ELL student is scheduled into numerous intervention classes, which limits their access to core curriculum.

Title I and Title III

Federal funds are provided by appropriating Title I and Title III resources to school districts in developing the academic intervention programs to address and narrow the achievement gap of all the significant subgroups of students. The accountability of these funds requires the implementation of standards-based education reform initiatives and meeting AYP growth targets for all significant subgroups of students including ELL as outlined by the NCLB. The paradox for second language learners is that they are caught between two educational programs. They are required to take ELD courses to become English proficient and are placed into ELA or math academic intervention classes if they are classified as far below basic and below basic on the CST. Both of these educational strategies are mandated by Federal and State policies. English language acquisition skills are needed for second language learners to become English proficient.

In order to achieve English language proficiency, students may need to take additional ELD classes in lieu of ELA. The significance of this paradox for LT-ELL students at the secondary level is that they are subjected to taking ELD courses to become English proficient however, they are not able to access English core content courses that count toward meeting the graduation requirements.

Title I and Title III of the ESEA mandate two types of assessments for students who are ELL: academic content and English language proficiency. In accordance with Title I, each state must now include LEP students, also known as ELL, into its academic assessment system and assess them in a valid and reliable manner. Title III of the NCLB Act requires schools to measure and improve students' English proficiency, with states being held accountable for improving English proficiency on an annual basis. The law provides support for states and school districts to create new assessments of English proficiency, as well as alternative assessments—in the form of native-language tests or accommodations on English-language tests—to help accurately measure LEP students' performance in reading and mathematics.

Current NCLB policy created conflicting incentives that encouraged an increase in reclassification rates while at the same time mandating high standards for ELL performance on standardized tests measuring both English proficiency and academic achievement (Jepsen & de Alth, 2005). Reclassification rates determine whether an ELL student has sufficient English proficiency to be classified as an RFEP student (California Department of Education, 2014a). Jepsen and de Alth (2005) continue to highlight that ELL students perform below their English-speaking peers and RFEP students on the mandated tests. However, this performance may reflect low English proficiency rather than low content knowledge (Jepsen & de Alth, 2005). The strategy was to support secondary level ELL students in acquiring English proficiency by offering double or triple ELD course offerings to provide interventions (Olsen, 2010) but the result was exclusion

from accessing college and career programs of study that integrate core content and career technical courses. This is especially true for ELL students at the secondary level, where the lack of access to the core curriculum is often compounded when ELL students are taking extra intervention classes in English, math, and ELD. Also, an increasing number of school districts are moving toward or have implemented the adoption of CSU-UC “a-g” graduation requirements to meet college entrance admissions (CDE, 2013b). This trend of implementing the CSU-UC “a-g” admission requirements poses several issues. First, students must take CSU-UC “a-g” high school courses that count toward graduation requirements. This limits ELL students’ availability to take UC approved courses (CDE, 2013b). Secondly, ELL students identified by the CELDT with results that score levels 1, 2, or 3 are required to take ELD classes to increase their rate of English language acquisition. According to Olsen (2010), LT-ELL schedules tend to be filled with English/ELD, intervention and support classes, and math.

English proficiency is important for the success of ELL students. Testing had been significant under the federal NCLB Act, and each school’s ELL population had to demonstrate improvement and success in both English proficiency and academic achievement. Under the re-authorization of the ESEA-Every Student Success Act, the intent is to measure student progress every year that offers actionable information about student learning – and still have information about how each group of students is progressing. The re-authorized ESEA is encouraging states to cut back on excessive testing, so they do not waste precious hours on tests that do not contribute to real learning (Duncan, 2015). Academic achievement tests are given in English and without proficiency in English, ELL students may be unable to demonstrate their academic abilities on these standardized tests (Jepsen & de Alth, 2005). ELL students consistently have lower test scores than other students on standardized tests (California Department of Education, 2012), including the CST and the California High School Exit Exam

(CAHSEE).) These were included in NCLB accountability and LEP contributes to this gap. At the high school level, as illustrated in Table 1, on page 3, depending on the CELDT level identification, the student could end up taking two to three ELD support classes. The impact of taking up to two or three ELD classes means ELL students are not able to access the core curriculum that counts toward their graduation requirements. In a 2003 study, Jespen and de Alth (2005) found the following categories for instructional practice offered in schools: ELD only, ELD and academic subjects in the primary language (bilingual education), ELD and Specially Designed Academic Instruction in English (SDAIE), and ELD and SDAIE with primary language support (but most instruction in English). ELD is designed for students who are just starting to learn English, whereas SDAIE teaches academic courses to students with more advanced English skills. By requiring the mandated ELD courses for CELDT 1, 2, or 3 students, ELL students are not on target to graduate within the four years allocated to acquire the 230/240 graduation credits needed to meet the graduation requirements (CDE, 2013b).

English Language Learner Assessment Policies

Over the past 30 years there has been considerable increase in the racial and ethnic diversity of elementary and secondary student populations. According to Lucas (2000), by 2050, students of color will collectively account for nearly 57% of the student population. In addition, Lucas indicated that a majority of this growth was among Latinos and Asians. As predicted by the United States Department of Commerce (1996), by 2010, Latino students would become the largest minority group in U.S. schools. By 2050, they will constitute more than 30% of the entire school-age population, up from about 13% in 1995. The increased level of immigrant students enrolling in our public school systems increases the number of young people who speak a language other than English at home.

Title I requires schools to improve the performance of LEP students on assessments of reading and mathematics beginning in third grade (United States Department of Education, 2001). However, the improvement margin reported by the United States Department of Education (USDOE) study does not reflect the same growth for second language learners, as many children of immigrants have limited English proficiency and are not making academic progress when compared to other subgroups.

Language Acquisition Policies and Practices

As a response to NCLB, states adopted state approved core curriculum and intervention programs to narrow the achievement gap of significant subgroups of students. Achievement gap refers to the differences in scores on state or national achievement tests between various student demographic groups (Anderson et al., 2007, p. 547). The conflict administrators were experiencing with the mandates of NCLB was to provide intensive intervention programs for students at the expense of innovating programs of study (Cawelti, 2006; Schoen & Fusarelli, 2008). The result is that schools narrow the curriculum because they are under considerable pressure to show AYP in reading and math. The emphasis on short-term test results of NCLB led to punitive sanctions for schools in narrowing the curriculum, encouraging excessive amounts of test preparation, undercutting best practices based on scientific research, demoralizing dedicated educators, and pressuring schools to abandon programs that have proven successful for ELL students over the long term (Crawford, 2004).

According to Villegas and Lucas (2007), the NCLB Act could have applied more than just specialized teaching techniques. NCLB could have had greater success had it integrated and aligned LEP student classroom experiences with cultural relevance. It demands a new way of looking at teaching that is grounded in an understanding of

the role of culture and language in learning (Villegas & Lucas, 2007). The emphasis on testing has narrowed the focus to subjects covered by the standardized tests (Olsen, 2010), especially in schools that have difficulty meeting their performance targets. Additionally, with English proficiency foremost among their goals, schools may rely less on dual language immersion programs that build student English and native language skills, instead adopting transitional bilingual or English immersion programs, even for younger LEP students.

In California, ELL students are assessed when parents or guardians complete the Home Language Survey (HLS) form and indicate that English is not the primary language spoken at home. The results of the HLS forms are then compiled and sorted into various categories to indicate the student's language acquisition level. This language level is based on combined indicators such as grades in content courses, CELDT scores, previous CST scores, and teacher recommendations. The operational definition of LEP varies considerably across schools, districts, and states. Among the many different criteria introduced by NCLB and states for classification of LEP (Abedi, 2004), the most important are (a) being a non-native speaker of English and (b) scoring low on English proficiency tests. In school districts in several states, the first criterion, being a non-native English speaker is based on information garnered from a HLS. Unfortunately, the validity of this survey is threatened by parental concerns over equity of opportunity for their children, citizenship issues, and parent literacy level (Abedi et al., 2004).

The CDE (2013a) designed and adopted the CELDT test as one of many measures to assess ELL students as they progressed with language acquisition and gained knowledge and proficiency as measured by the state's accountability measures. In California, the CST was given predominately in English and math. Students were assessed, and based on their results, were placed in the following bands of the CST: far below, below basic, basic, advance, and proficient. For ELL students, the results of these

assessment tests were used as measures to identify criteria for re-designation into Fluent English Proficient (FEP). English language skills are needed for ELL students to acquire English language proficiency. Mastery of academic language is arguably the single most important determinant of academic success for individual students (Francis et al., 2006, p. 7). According to Francis et al. (2006) the role that language plays in determining students success with academic content is in the proficient use of—and control over—academic language, which is the key to content-area learning.

According to Olsen, (2010) and Francis et al. (2006), students who do not score well on tests—such as late entering immigrants or LT-ELL students, and those who have difficulty learning English may grow discouraged by their poor performance and could go unnoticed in secondary schools possibly dropping out of school. High LEP dropout rates create additional challenges for high-LEP schools, which must meet state-set graduation standards required under NCLB for LEPs and other students. As ELL students progress through the prescribed four years of high school education toward meeting the graduation requirements, they are enrolled in numerous ELD courses that limit their ability to participate in obtaining the UC graduation requirements and accessing College and Career Pathway Programs. The impact on the LT-ELL student is that they have to achieve on two simultaneous paths of learning English and meeting the graduation requirements while accessing college and career pathways. Oftentimes LT-ELL students lose engagement and interest when they are unable to access courses that lead toward college and career readiness (Olsen, 2010).

Long-Term English Language Learners

LT-ELL is defined as an English Learner who (a) is enrolled in any of grades six to twelve; (b) has been enrolled in school in the United States for more than six years;

(c) has remained at the same English Language Proficient (ELP) level for two or more consecutive years as determined by the CELDT or any successor test; and (d) scores far below basic or below basic on the ELA standards-based achievement test or any successor test (California Department of Education, 2014a). In California, the majority (59%) of secondary school English Learners are LT-ELL (Olsen, 2010). LT-ELL students have the added dimension of ethnic and language diversity that presents challenges in accessing college and career academy programs based on language acquisition needs. Olsen (2010) found that the majority of California secondary English Learners are LT-ELL as described by the criteria of being enrolled in a United States school for more than six years (p. 10).

Impact of the Reauthorization of Elementary and Secondary Education Act

In March 2010, President Obama released a blueprint outlining the revisions of the ESEA. This blueprint calls for (a) raising the standards for all students in English language arts and mathematics; (b) developing better assessments aligned with college and career ready standards; and (c) implementing a complete education through improved professional development and evidence-based instructional models and supports. The shift from the previous ESEA is an emphasis on rigorous college and career ready standards aligned to the states' adopted standards in ELA and mathematics. This is intended to build toward college and career readiness by the time students graduate from high school and will include high-quality statewide assessments aligned with these standards as outlined in the Blueprint for Reform: the Re-authorization of Elementary and Secondary Education Act (California Department of Education, 2011; United States Department of Education, 2010). With the anticipation of a re-authorized ESEA, states

had to develop ways to integrate college and career ready standards into the states' content standards and assessments.

California Senate Bill 1200, Statutes of 2012, provided an update of the California Common Core State Standards: English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects . The CA CCSS for ELA/Literacy standards were modified on March 13, 2013, following the recommendations of State Superintendent of Public Instruction Tom Torlakson, to include the addition of the College and Career Readiness Anchor Standards and technical changes (California Department of Education, 2014b, Ed Code 60605.10). The stated aim of the CCSS is to define the knowledge and skills students should achieve in order to graduate from high school ready to succeed in entry-level, credit-bearing academic college courses and in workforce training programs. The College and Career Readiness anchor standards constitute the backbone of the CCSS and define the general, cross-disciplinary literacy expectations for students in preparation for college and the workforce. The shift to include college and career readiness anchor standards is intended to bring coherence with the performance assessments described in the upcoming CCSS as they relate to students applying their knowledge and skills in response to complex real-world problems. The CCSS are based on content standards reaffirmed in August, 2010, when California joined 45 other states in adopting the California Common Core State Standards: English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects.

In 2013, State Superintendent Torlakson released his multi-faceted initiative aimed at integrating Career Technical Education (CTE) into high school curriculum to help link students with California business and industry. CDE: The Blueprint for Great Schools (2011) describes the need to increase the personalization of instruction and engagement of students through career-themed LL/CPA pathways. State Superintendent Torlakson announced at the Annual Educating for Career Conference on March 3,

2014, that the common core would include the new Smarter Balanced assessments. These include standards for career ready practice, which align to college and career readiness for postsecondary education and career training, i.e. workforce beyond academic skills that would address California's longstanding goal of college and career readiness for every student to compete in a global economy. The CCSS implemented in 2015, emphasize that having college and career readiness anchor standards embedded throughout the content standards may provide more success for students in the transition from high school to either postsecondary education or the workforce.

Career Technical Education

Career Technical Education Transformation

CTE has gone through numerous transitions leading to the current practice of designing and implementing college and career pathways as a reform model for high schools throughout the nation. In 1918, the Smith Hughes Act provided the first federal funds for vocational education and it explicitly defined vocational education as preparation for occupations that did not require an advanced degree. According to Conley and McGaughy (2012) from the 1920s, until the early 1960s, large school districts had separate high schools for vocational oriented students and those going to college. This practice of separating vocational education technology from core academics led politicians and businesses to believe that the United States was not educating its future work force in both academics and technical skills. CTE experienced a significant shift from a single stand-alone vocational course to multi-disciplined core courses and a technical program of study.

The Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) was re-authorized and its overarching purpose was to develop the academic, career and technical skills of secondary and postsecondary education students who elect to enroll in CTE programs. According to Meeder (2008) the reauthorized Perkins legislation provides increased focus on the academic achievement of CTE students, strengthens the connections between secondary and postsecondary education, and improves state and local accountability (p. 5).

Since the mid-1990s, a growing number of high schools and districts have been trying to boost student engagement and achievement by enrolling students in career academies. There is strong evidence that career academies improve attendance, credits, grades, and graduation rates (Stern, Dayton, & Raby, 2010). In addition, the career academy approach is one of the oldest and most widely established high school reforms in the United States according to Stern, Dayton, and Raby (2010).

Lynch (2000) reported that another significant change was the influence of the Association of Career and Technical Education (ACTE), which is the largest national vocational education organization. ACTE has campaigned other organizations and government agencies to remove vocational education from titles, policy documents, and legislation and replace it with CTE. The paradigm shift from the old vocational technical programs to the new integrated career and academic programs has propelled a new trajectory of development of college and career pathway programs based on how the economy has shifted from agricultural to industrial jobs to technical jobs. These influences have placed demands and shifted the need for new occupations that require skills necessary to be successful in this new economy and are fundamentally different from what the old economy required. This shift to high skills/high wages is needed to be competitive in a global economy leading to the increased importance of foundational academic knowledge and skills; communication capabilities; technology proficiency;

problem-solving strategies; and flexibility, initiative, and adaptability (Conley & McGaughy, 2012).

Career Academy Model

Career academies have existed for more than 30 years and have been implemented in more than 1,500 high schools across the country. The organizational design of the Career Academy Model (CPA) model is a three-year program (grades 10-12) structured as a school-within-a-school which provides more supportive and personalized learning for students. Academies incorporate integrated academics, CTE, business partnerships, mentoring, and internships (California Department of Education, 2014c). Students are placed in cohorts that attend the same grade level and career themed course of study. The teachers in the CPA programs support the development of student peer-to-peer networks, and teacher to student relationships that enhance student learning. Career academies provide an integrated instructional approach by combining core content academic courses with an occupation-related career theme that is interwoven between these domains. Stern et al. (2000) prepared an evaluation summary showing that over four decades of career academies had shown effective improvement outcomes for students during and after high school. According to Stern et al. (2000) career academies have therefore become the most durable and best-tested component of a high school reform strategy to prepare students for both college and careers (p. 2). Studies have found that career academies create more supportive and personalized learning environments through a school-within-a-school structure in which the curriculum combines core academic and occupation-related course requirements that aim to promote applied learning and satisfy college entrance requirements (Kemple & Snipes, 2000; Schoen & Fusarelli, 2008; Stern et al., 2000).

California Education Code 54690, finds that the CPA program has proven to be a highly effective state-school-private sector partnership, providing combined academic and occupational training to high school pupils who present a high risk of dropping out of school and motivating those pupils to stay in school and graduate (California Department of Education, 2014b). According to Stern et al. (2000), since the mid-1990s, a growing number of high schools and districts have been trying to boost student engagement and achievement by enrolling students in career academies. Maxwell and Rubin (2000) found higher grades for academy students increased their probability of going to college and two of nine academies in the study gave an added boost to college-going rates resulting in 52% of former academy students going to four-year colleges, compared to 36% of non-academy students advancing to a four-year college experience.

Embedded in college and career pathway programs are coherent instructional prevention models that address behaviors impacting school wide efforts to increase attendance, increase academic proficiencies, and decrease behaviors that have a negative impact on students. According to Mac Iver and Mac Iver (2010) teachers need standards-based curricular materials, engaging lesson plans, and assessment materials enabling them to tailor instruction to student needs. Mac Iver and Mac Iver (2010) continued to stress the impact of the “evidence that indicates the importance of school wide consistency and coherence in curriculum and instruction rather than a hodgepodge of materials within the same grade and across grades found in many schools” (p. 28). It is crucial to ensure that high-quality instruction is happening in the classroom each day for all students and that school-level structures are in place to promote positive behaviors, including high attendance. As explained by Lucas (2000) educators are encouraged to consider one important question: How can students be guided through these transitional experiences to become young adults who are prepared not only for work that is

productive and fulfilling for them but also for lifelong learning and active participation in the lives of their communities and this country? (Lucas, 2000, p. 3).

These are some of the identified components of Response to Intervention (RTI) outcomes for college and career pathways. Mac Iver and Mac Iver (2010) continued to stress that the RTI models used in high schools needed to focus on students' ability to integrate skills and knowledge to produce intellectual products of value that are necessary for students to be ready for college and careers. According to Lucas (2000), to achieve that level of knowledge requires that the school experience be personalized to a much greater extent than is possible in the typical secondary school.

A large-scale, multi-site, random assignment research design was conducted to determine the impact of career academies on student outcomes. Kemple and Snipes' (2000) research sample was targeted at serving a mix of students including those at risk of dropping out of high school or failing academically as well as students who had done well in school. Most of the students in the study sample were from minority backgrounds, 56% were Hispanic and 30% were African-American, reflecting the racial and ethnic make-up of their communities. Also, more than one-third of the students came from single-parent households and about one-quarter indicated that their families received public assistance. At the same time, just under half the students reported that both their parents were employed and about one-third reported that at least one parent had attended college (Kemple & Snipes, 2000, p. 20). This study included 56% Hispanics as a subgroup, with 7.6% as limited English speakers. The study concluded that career academies can provide an effective means of reducing the high school dropout rates and they can enhance student engagement with school, especially if they increase personal support for students through involvement with teachers and peers. The concern with the findings is that the percentage of limited English speakers (7.6%) is significantly low compared to the percentage of Hispanic students in this study. It concluded that career

academies are a good reform model to increase engagement and prevent students from dropping out of school, however as Olsen (2010) indicated, lacking English language is a significant hindrance for LT-ELL students and contributes to higher rates of dropping out of high school.

According to Meeder (2008) Perkins IV outlines that a career and technical program of study includes a coherent offering of academic courses paired with a CTE sequence of courses from introductory, intermediate, and capstone or advanced. Inherent in a program of study are components that enrich the student outcomes by creating a culture of high expectations and support, personalized relationships between adults and students, articulated curriculum, rigorous and relevant instruction that teaches students through experiences that are challenging, stimulated reflective thought, and real-world applications of skills and knowledge (Office of Vocational and Adult Education, 2010, p. 1). These foundational programs of study include opportunities for career exploration and planning. They enhance students' academic achievement and motivation to learn more, enable students to acquire generic work competencies and skills useful for employment, and establish pathways for continuing education and lifelong learning (Daggett, 2008; Lynch, 2000). As the shift occurred from the previous structures of the vocational education programs to the current practices of the college and career pathways, the research presented in this study may show evidence that these programs have been and continue to be highly effective in providing academic and social support for students in college and career pathway programs.

Linked Learning Initiative

Local reform programs are implemented to meet the specific needs of the students at a school or district. Oftentimes, these reform programs are implemented after

the successful award of a grant or partnership submission that provides the financial resources to establish the program. For the purposes of defining what is meant by a local reform initiative, this study focused on the school reform strategy of the Linked Learning Pathway approach as a potential strategy for ELL students accessing college and career readiness skills.

Founded by the James Irvine Foundation in 2006, ConnectEd: The California Center for College and Career is dedicated to advancing practice, policy, and research aimed at helping young people prepare for both college and career through the Linked Learning-high school improvement approach (Stanford Center for Opportunity Policy in Education, 2011).

In 2009, ConnectEd was the technical support provider that led the California Linked Learning District Initiative. School districts that are part of the California Linked Learning District Initiative have developed a master plan for expanding Linked Learning in their high schools. The Linked Learning initiative or approach gives all students access to the experiences and conditions they need to grow as learners to be prepared for college, career, and civic life. To achieve this goal, the Linked Learning initiative brings together rigorous academics, a challenging theme-based or career-based curriculum (e.g., health professions, technology, global studies) and an opportunity to apply learning through real-world experiences. The Linked Learning approach blurs the distinction between CTE and college preparation by creating a pathway toward a single goal: preparation to succeed in college and careers (The California Center for College and Career, 2012ab; Saunders, 2013). According to the James Irvine Foundation, Linked Learning is a high school reform effort that includes cross disciplinary instruction, career-themed experiences and content, and opportunities for solving real-life problems as strategies to increase student motivation, engagement, and learning. Linked Learning strategies act as an umbrella by aligning the approach to education that transforms the

traditional high school experience. It brings together strong academics, a demanding technical education, and real-world experiences to help students gain an advantage in high school, postsecondary education, and careers.

The Linked Learning approach has four foundational pillars of pathway program development (a) rigorous academics: an academic core that includes college preparatory English, mathematics, science, history, and foreign language courses for all students; (b) real-world technical skills: a challenging career-based component of three or more courses that help students gain the knowledge and skills that can give them a head start to a successful career; (c) work-based learning: a series of work-based learning opportunities that begin with mentoring and job shadowing and evolve into intensive internships, school-based enterprises, or virtual apprenticeships; and (d) personalized support: services including counseling and supplemental instruction in reading, writing, and mathematics that help students master academic and technical learning (The California Center for College and Career, 2012ab; Linked Learning Alliance, 2014; Saunders, 2013).

Linked Learning is delivered through a wide variety of structures or programs known as *pathways*. These pathways are shaped by existing CPA school structures and local opportunities for partnerships, which support the skills and backgrounds of instructional staff. Pathways vary in their themes or career focus, their organization of coursework, how much time students spend on and off campus, their relationships with two- and four-year colleges, and their partnerships with community organizations, business, and industry. Pathways align with careers or majors and may be delivered in academies, magnet schools, occupational training centers, small themed high schools, or small learning communities within large high schools (Saunders, 2013, p. 6). This research study investigated if LT-ELL students are accessing LL/CPA pathways to achieve the goals of the CCSS of being college and career ready.

College and Career Ready

The CCSS are designed to have college and career anchor standards that emphasize the need for all students to be college and career ready in order to access postsecondary opportunities by the end of the twelfth grade. How does the integration of college and career anchor standards into the CCSS impact secondary level underserved communities of learners? Access to college and career programs that align to postsecondary college and career opportunities is pivotal for underserved students.

Recently, many research-based programs have been developed as reform models to address high school achievement issues. Martinez and Klopott (2005) researched four programs and found that two of the four models had specific components that are essential to structures of college and career pathway programs. For example, America's Choice program supports incorporating the high school model into small schools or house systems, a core academic curriculum, and strong college and work-based technical preparation programs. Another model discussed in the study was High Schools that Work (HSTW) which focuses on the central philosophy or practice that includes holding students to high expectations, increasing the rigor of vocational and academic studies, and integrating work-based learning and academic curriculum. These two programs have embedded structures to assist students in being postsecondary ready by providing the essential support needed as they are preparing for postsecondary options. It is apparent that the organizational structure of college and career pathways/academies, which integrates core content with technical courses, offers students the relevance and engagement in learning and provides the access to a rigorous CTE program of study that leads to postsecondary opportunities.

The college and career readiness movement focuses mainly on strengthening curriculum and combining conceptual learning with relevant practical experience. The

movement toward small schools and learning communities is intended to improve the relationships among students and teachers and create conditions for more effective teaching and learning as cited by Stern et al. (2010). A critical connection identified in this section is the development of the personalization of teaching and learning that occurs in college and career readiness pathways. This connection ties together the skills taught and learned that are needed to nurture a college going culture. According to Stern et al. (2010) learning how to combine conceptual learning with relevant practical experience rounds up the integrated or blended approach of applied learning that is rigorous and relevant to the students.

Lucas, Henze, and Donato (1990) conducted a study of six high schools that initiated a program to promote the academic success of language minority students. The student interviews revealed that the relationship they had with teachers and other adults in the schools, including counselors, had the greatest impact on their feelings about school and about themselves as students. Specifically, the students indicated that the teachers who made a difference cared about them, empathized with what they were going through as immigrants and learners of English as a second language, encouraged them to go beyond the minimal expectations that the larger society had for them, encouraged them to aspire to become leaders, and spent time with them on their personal issues. The career pathways have proven that student engagement increases when the teacher-student relationship is fostered and students in pathway programs thrive with the support of their teachers.

These career pathway programs are especially vital for ELL students acquiring English language skills as they are engaged in college and career pathway programs that are rigorous and relevant to them. According to leading researchers like Lucas (2000), the most obvious challenge for ELL students in secondary schools is to develop their proficiency in academic English quickly enough so that they can succeed in courses and

on tests that are cognitively and academically demanding. These courses can be college and career technical courses that integrate the acquisition of language with rigorous and relevant technical courses that engage students. According to Francis et al. (2006) and Conley (2014) other factors (e.g., motivation, persistence, and quantitative skills) play important roles in the learning process.

In order to understand the complexities of how ELL students could access college and career readiness standards, the conceptual framework used for this dissertation was student engagement and optimism-based social capital. It is proposed that the implementation strategies of Linked Learning could provide a link to both frameworks of student engagement and optimism-based social capital for high school and ELL students. According to Saunders (2013) community members and educators at Linked Learning sites model the values, care, commitments, relationships, and community interests that they hope students will learn and achieve (p. 51).

Student Engagement/Social Capital

In a study by Ogbu and Simons (1998), the authors identified a historical perspective on the factors contributing to minority student engagement with school systems. The factors are instrumental and symbolic beliefs about how schools are interpreted. This led Ogbu and Simons to explain their construct of the “cultural-ecological theory, which consists of two parts (a) how minorities are treated or mistreated in education in terms of educational policies, pedagogy, and (b) how minorities perceive and respond to schooling as a consequence of their treatment” (1998, p. 158).

Ogbu and Simons (1998) continued to discuss this research by identifying how the treatment of minorities in the wider society was reflected in their treatment in education. Three outcomes of this study affect school adjustment and performance. First

are the overall educational policies and practices toward minorities (for example, policy of school segregation, unequal school funding, and staffing of minority schools, etc.). Second is how minority students are treated in schools and classrooms (e.g., level of teacher expectations, teacher-student interaction patterns, grouping and tracking). Third are the rewards, or lack of, that society gives to minorities for their school credentials, especially in employment and wages. All minorities studied by Ogbu and Simons (1998) have experienced these discriminatory treatments. Structural barriers or discrimination in society and school are significant determinants of low school achievement among minorities. The feelings of disenfranchisement by minority students that are also second language learners is compounded by their limited expectations for a quality education and their lack of skills to be college and career ready.

Conchas (2001) illustrated that institutional mechanisms have a direct effect on Latino school engagement. Institutional mechanisms are the school systems of actors (teachers, administrators, etc.) that function within a school system to either construct school failure or success among low-income Latino students. Social networking among students is critical, especially for disenfranchised students as they seek each other out for support. Mehan et al. (1996) referred to social scaffolding to describe the institutional support system of programs like AVID and Career Academies that provide a supportive learning environment, especially among Latino and African-American youth. This social scaffolding plays out in many different programs that support students in more personable learning situations. According to Mehan et al. (1996), social scaffolding processes foster student's identities and peer cultures oriented toward academic success. As emphasized by Oseguera, Conchas, and Mosqueda (2011) accessing high-quality social capital is invoked to explain the educational engagement and achievement of students. Appleton et al. (2006) indicated that since school personnel cannot alter family circumstances (e.g., income and mobility), other variables, including those related to the development of

students' perceived competence, personal goal setting, and interpersonal relationships, offer students optimism for positive networking with peers (e.g., Floyd, 1997; Worrell & Hale, 2001). As described by Stern et al. (2000), career academies help students develop successful support networks that are fostered by institutional agents (academy teachers) that support academic success.

Factors of engagement of secondary level students must be taken into consideration and evaluated to determine how students with diverse learning needs can access quality education. Olsen (2010) continued to focus on how LT-ELL students are stuck in CELDT 3 and are losing ground in keeping up with graduation requirements. This creates the *silence of disengagement* for LT-ELL students. They are slowly losing interest and engagement in high schools because they are unable to access the full curriculum and the programs that are identified as college and/or career ready that provide them access and opportunity to postsecondary options. English proficiency is also important for success in the rapidly growing high-skill, high-wage, and high-demands labor market (Gonzalez, 2000; Trejo, 2003). As illustrated in Table 2, the largest ethnic cohort dropouts are identified as Hispanic or Latinos based on the ratio of sheer numbers.

Cohort Dropout Data for the Class of 2011-2012		
Statewide Results		
Ethnic/Racial Designation	Cohort Dropouts	Cohort Dropout Rates
Hispanic or Latino of any race	39,103	16.1%
American Indian or Alaska Native	737	18.4%
Asian	2,452	5.5%
Pacific Islander	492	15.4
African American	8,638	22.1
White	11,743	8.2%

CDE: Dataquest 2011-2012 Cohort dropout data.

Table 2: Cohort Dropout Data for the Class of 2011-2012

Lucas (2000) continued to illustrate that flexibility in scheduling or release time for teachers can establish academic teaming and other collaborative arrangements to give individual teachers access to the knowledge and experiences of others who know their students. According to Lucas (2000) research showed that teachers who could develop trusting and caring relationships with students were better able to engage them in learning. Relationships with adults such as counselors and other advocates for students play a crucial role in students' willingness and ability to become engaged in learning. Lucas (2000) emphasized that this was especially true for students who are not part of the traditional "mainstream" student population and those in the midst of multiple transitions, such as ELL students (p. 6). To reinforce these components of support for students and parents, Ogbu and Simons (1998) stated:

personalization of learning is based on trust that parents and students have with a teacher which builds on creating culturally responsive instruction to engage students and shows them that the teacher honors their cultural and personal experiences and will help make school a less alien place (p. 180).

It is imperative that ELL students have access to college and career pathways. The research shows they have a high drop-out rate and in order to engage them, teachers need to build social capital.

Optimism-Based Social Capital and Student Engagement

This research study explored how Optimism-Based Social Capital Theory is utilized as a foundational platform in explaining factors that distinguish the inter-and intra-ethnic socialization process among minorities from the socialization process more typical of mainstream students (Stanton-Salazar, 1997). In addition, the study

investigated how student engagement attributes in building and sustaining peer networks that are formed through social capital. Broadly defined, social capital is the aggregate of the actual or potential resources embedded in social networks that may be converted into other manifestations of capital, including material capital (Bourdieu, 1977), human capital (Coleman, 1988), and healthy civic participation and community cohesion (Putnam & Borko, 2000). According to Ream (2005), social capital impacts student/peer connectedness, which may add capacity to ELL students in establishing social networking links. Stanton-Salazar and Dornbusch (1995) examined the structures of how Latino student engagement is fostered in networks within a school as a source of social and cultural capital.

Social Capital Theory is important to this study to determine which variables contribute to student/peer connectedness for ELL students in accessing and participating in LL/CPA pathways. Stanton-Salazar and Dornbusch (1995) argued “that supportive ties with institutional agenda represent necessary conditions for engagement and advancement in the educational system and, ultimately, for success in the occupational structure” (p. 117). In reviewing how career academies serve as a sub-set of an educational institution, supporting evidence indicates that career academies aim to function as “communities of practice” (The California Center for College and Career, 2012ab) for students and teachers. For students, such support includes the personalized attention they get from their teachers, their teachers’ expectations, their classmates’ level of engagement in school, and the opportunities they have to collaborate with their peers on school projects (Kemple & Snipes, 2000). Oseguera et al. (2011) emphasized that the underpinning of student/peer relationships or social support was the development of social networks that cultivate the development of social capital. Oseguera et al. (2011) continued to describe social capital as the resources gained through social relationships that positively influence educational outcomes. As illustrated by numerous scholars cited

above, they suggest that personalization for students is critical. This is a key strategy found in LL/CPA pathways. This foundational component makes up a quality pathway by providing social scaffolding that aids in achieving social capital for students.

Supporting research indicated that peer networks added value to students' persistence and increased student engagement. The framework used in this study evaluated how Optimism-Based Social Capital builds the capacity of developing peer networks that influence the engagement of ELL students participating in LL/CPA pathways. They are designed to address and reduce at-risk factors such as dropout and remediation rates, while promoting college and career readiness for all students. Previous research on career academies has suggested that participation in career academies is positively associated with engagement (Kemple, 1997; Kemple & Snipes, 2000; Stern et al., 2000). However, in examining previous research little quantitative data has been found to support the relationship between LL/CPA pathway participation and student engagement for ELL students. In previous studies of career academies, engagement was inferred based on increased attendance, graduation rates, participation in school activities, and achievement scores on standardized tests (Kemple & Snipes, 2000). According to Appleton et al. (2006) research on constructing an engagement instrument consisted of five factors that underlay cognitive and psychological engagement. These were (a) teacher-student relationships, (b) control and relevance of schoolwork, (c) peer support for learning, (d) future aspirations and goals, and (e) family support for learning. This engagement instrument was used to assess LT-ELL student engagement in LL/CPA pathways.

Conclusion

The growing number of high school students at risk of dropping out, the changing needs of the workplace, and the need to prepare students to be productive and successful workers in the high-skill and high-wage workforce needs to be addressed in the current reforms that target at-risk students (Castellano, Stringfield, & Stone, 2007; Oakes & Saunders, 2007). As the federal and state educational agendas are addressing college and career readiness standards for all students, secondary level LT-ELL students face conflicting barriers that limit their access to college and career readiness standards in career academy programs of study.

Under the NCLB during the previous 15 years, schools districts had to address the low performance of students and develop an intervention plan to narrow the academic gap of significant subgroups. According to Olsen (2010), a statewide survey in 2009, found that schools with high ELL student enrollment and low academics, resulted in the schools being placed into Program Improvement (PI) or High Priority School Grant status. Almost two-thirds (65%) reported that corrective actions required them to expand the hours of the day spent on ELA and math resulting in reduced access to science and social studies (p. 19).

This study addressed the pendulum swing of how college and career readiness standards are being emphasized in the re-authorization of the ESEA. More specifically how college and career-ready standards impact and provide LT-ELL students access to career pathway programs like LL/CPA pathways.

This poses an additional challenge for LT-ELL students accessing the needed English language acquisition skills to become English proficient and access rigorous and engaging college courses. This research investigated how the Linked Learning secondary reform strategies impact LT-ELL students in preparing them to become college and career

ready as outlined in CCSS. For the purposes of this study, postsecondary options include entering a two or four-year college, technical school, military, or the workforce.

CHAPTER 3

METHODOLOGY

Introduction

The over-arching inquiry of this study was to determine if LT-ELL students were accessing LL/CPA pathways to achieve the goals of CCSS of being college and career ready. The purpose of this study was to examine the differences, if any, in student engagement, achievement, and access to college and career readiness standards between LT-ELL students participating in a LL/CPA certified pathway, and LT-ELL students not participating in a LL/CPA pathway within the same high school. Factors of student achievement and engagement in the academies were measured in this study, as they are foundational components that make up the structure of a career academy.

Measuring student engagement is the key to improving student achievement, especially for those classified as at-risk, meaning at high risk for dropping out of school (Appleton, Christenson, Kim, & Reschly, 2006).

The CCSS explicitly indicate that all students should be college and career ready by the time they graduate and this implies that college and career readiness standards will be accessible to all students. This study investigated how LT-ELL students gain access to college and career readiness standards in LL/CPA pathways.

The research methodology applied to this study was a case study using mixed methods of qualitative and quantitative measures to explore an in-depth inquiry of the Linked Learning approach and identify factors that either enhance or impede LT-ELL

students in accessing the college and career readiness standards for postsecondary options. Case studies are a method of inquiry in which a researcher explores a program, event, activities, process, or one or more individuals in-depth. (Creswell, 2009). As Lichtman (2006) described there are three types of case studies - the typical case which is a program that exists in a school and is considered typical of others in the same set; an exemplary or model case study which is a program that is nominated as the best and has outstanding aspects; or an unusual or unique case study which is a program using specific materials and is unique or special in some way. The focus of this study addressed the exemplary classification of certified Linked Learning pathways as a model case study.

This study was designed to broaden understanding by incorporating both qualitative and quantitative research as a vehicle to gather and extract empirical data for analysis. A concurrent mixed method is where the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem (Creswell, 2009). As illustrated by Lichtman (2006) this research addressed the exemplary components of certified Linked Learning Pathways. ConnectEd: The Center for College and Career Readiness has developed criteria of the essential elements that make up a quality pathway and a certification protocol that evaluates if a pathway has achieved the criteria required to be named as a certified LL/CPA pathway (The California Center for College and Career, 2012ab). Three academies at USA High have participated in the certification process and are identified as model programs that have met the certification criterion (The California Center for College and Career, 2012ab). The three certified LL/CPA pathways at USA High are Engineering, Multimedia, and Law (T. MacGlawn, personal communication, February 25, 2015).

Another unique feature of this case study was that 47% of the enrollment at USA High was classified as ELL. It represents the highest percentage of ELL students in this school district. Utilizing USA High as the case study site provided a representative

sample of LT-ELL students in the three certified LL/CPA pathways of Engineering, Multimedia, and Law. The rationale for selecting these three pathways is that they have all completed the self-study assessment utilizing over 40 Linked Learning essential elements associated with qualifying as a high quality pathway program. The school successfully completed the site evaluation visit by ConnectEd officials and was awarded Linked Learning certification (ConnectEd: California Certification Criteria). The remaining two academies Health, and Visual and Performing Arts have not been certified, indicating that their program of study or quality pathway criteria has not been conducted.

This study used the sequential exploratory strategy for a mixed methods design that often appeals to researchers with strong qualitative data collection and analysis. The first phase is qualitative data collection and analysis followed by a second phase of quantitative data collection and analysis that builds on the results of the first qualitative phase (Creswell, 2009 p. 211). The intent of this sequential exploratory design study was to assess whether the certified LL/CPA pathways provide access to LT-ELL students to achieve the goals of the CCSS as being college and career ready. In this study, data was collected and analyzed using HyperResearch software (Research Ware, 2012) to examine differences in academic achievement and engagement between LT-ELL students in LL/CPA pathways and LT-ELL students not in LL/CPA pathways. HyperResearch is a cross-platform analysis software program that helps preform qualitative and quantitative data analysis. The mixed method quantitative portion was used to describe trends in data or the relationship between variables (Creswell, 2009). The variables studied in the quantitative methods of this study were the CAHSEE pass rates, grade point averages, CELDT rates, and credits earned toward graduation for the Engineering, Multimedia, and Law Academy, and the non-academy LT-ELL group. At the same time, the inquiry of how college and career academies provide ELL students access to college and career readiness standards was explored using qualitative interviews with LT-ELL students in the

Engineering, Multimedia, and Law Academies and LT-ELL students in non-academies at USA High School. Quantitative and qualitative data was combined to better understand this research problem and identify the issues ELL students encounter in achieving the goals of the CCSS as being college and career ready for post-secondary options.

Analysis of Variables that are Related to the Research Questions

Dependent Variable

1. ELL students that are enrolled in the Engineering, Multimedia, and Law Career Pathway programs at USA High

Independent Variables

1. ELL student placement process into programs/courses
2. ELL student exposure to and knowledge of the Career Pathway programs
3. ELL student access to Career Pathway programs
4. Identification of gatekeepers that influence exposure or knowledge of Career Pathway programs
5. Types of experiences ELL students have with Career Pathway programs

Control Variables

1. LT-ELL students at USA High
2. Includes only twelfth grade students

Site Description

The data was collected at USA High, one of six comprehensive high schools in the school district. USA High is a Title 1, comprehensive secondary school labeled as

a PI school under the NCLB federal legislation. The school is currently in year PI 5, meaning it has not fulfilled all of the requirements to make AYP under NCLB. USA High students must reach annual proficiency goals in math and English to satisfy AYP for two consecutive years in order to be removed from PI status.

The USA High community of 1581 students is richly diverse. Student enrollment includes 11% receiving special education, 47% qualifying for English Learner support, and 92.2% qualifying for free or reduced-priced meals (California Department of Education, 2014c). The student population has been approximately 82.8% Latino. The African-American population has remained steady at 7.1%. The remaining student population is Asian at 4.9% and Filipino, Native American, and Pacific Islander at 3.1%. Some of the Latino students at USA High are immigrants, mostly from Mexico, Central and South America. The majority of the Latino students are second and third generation students.

USA High is located in a large, predominately racial-minority city in the western United States. According to the U.S. Census Bureau report (2010), the city's racial and ethnic composition is 39.5% Latino, 26.6% African American, 17.1% White, 13.5% Asian, and 5.6% Other. The city's household income average from 2008-2012 was \$54,657. USA High is one of six comprehensive high schools serving a low-income and racially diverse student body that is reflective of the larger community. The graduation rate at USA High has been changing from 2010 to 2013 with percentages of 65.2, 79.6, 70.9, and 88.7, respectively. Graduates completing all courses required for UC/CSU admission have changed from 2010 to 2013 and have shown a decrease in students meeting the UC/CSU admissions criteria with percentages of 57.1, 31.2, 39.4, and 31.6, respectively (California Department of Education, 2014c).

The CAHSEE pass rate for USA High showed that 59% of tenth graders who took the test in February 2014, passed the math portion and 59% passed the language arts

portion of the exam. The percentage of all students at USA High who scored at proficient and advanced levels was 25% in English and 24% in mathematics as compared to California state averages of 84% in English and 86% in mathematics.

USA High offers a full curriculum ranging from general classes to Advanced Placement. The rationale for selecting USA High is that it is organized as a *wall-to-wall* career pathway school with five career academies in Engineering, Health, Law, Multimedia, and Visual Performing Arts. Organizing a school into a *wall-to-wall* structure or model means that all students are assigned into one of the five career pathways at the school. Of the five career academies, Multimedia, Law, and Engineering are Linked Learning certified.

USA High School is in the (pseudonym) Preparatory Technical High School District (PTHSD) and is one of the nine school districts in California that implemented the Linked Learning initiative in 2009. Each of the nine participating school districts had to design a four-year Linked Learning implementation plan that addressed a strong district leadership committed to making multiple pathways a central strategy to transforming their high schools. These districts had existing infrastructures of strong pathways programs, a broad-based community coalition to support the implementation plan, and credible plans to implement four to eight high quality pathways within three years.

As the Linked Learning approach was being implemented, PTHSD developed and addressed all the components of the Linked Learning implementation plan. These components included Leadership, Equity and System Alignment, Pathway Design and Quality, and Operations. Prior to developing the implementation plan, each school district has to complete a Needs and Capacity Assessment that provides a snapshot of current practices of the implementation process (The California Center for College and Career, 2012ab). In the section of Leadership, Equity and System Alignment of the

implementation plan for PTHSD, the Access and Equity key findings from the Needs and Capacity Assessment were that “In the past, not all ELL students were included in Academy Pathways and there are still perceived barriers to the inclusion of level 1 and 2 ELL students” (Preparatory Technical High School District, 2011, p. 8). This created an opportunity to investigate why ELL students whose scores on the CELDT placed them in ELD levels 1 and 2, as well as LT-ELL students, were being excluded from participating in the LL/CPA pathways. An apparent conflict of competing policies emerged. ELL students were being scheduled into blocked sessions of two ELD courses to develop their English language skills and this impacted the opportunity to access career pathway courses.

PTHSD has a high percentage of students that are classified as ELL. District data shows that 41.83% of the district high school students are ELL. As illustrated in Table 3, the total 9-12 grade student enrollment in the six comprehensive high schools is 6,027 students and the percentage of English Learners is approximately 42% or 2,595 students (California Department of Education, 2012).

Enrollment	Language	# of EL's	# of Fluent English Proficient (FEP) students	Total Number of EL and FEP students	Percentage of total enrollment that is EL and FEP
6027	Spanish	1291	1304	2595	41.83%

Date Source: 2011-2012 CDE Language Groups that meet the 45% and above transition needs

Table 3: Who are the PTHSD Comprehensive High School (9-12) ELL Students

The rationale for selecting USA High is that it offers an opportunity to study LT-ELL students in the setting of the three career academies that are Linked Learning certified. Additionally, USA High has the largest ethnic and language diverse population of LT-ELL students. For the purpose of this study, Engineering, Multimedia, and Law

were the targeted academies to conduct this research because they are Linked Learning certified. Each of the three has approximately 250 students enrolled.

Process of Participant Selection

This collective case study focused on four sub-cases comprised of three lead teachers, two counselors, six LT-ELL students in LL/CPA pathways, and five LT-ELL students not participating in LL/CPA pathways. The participants for this study met the criteria for participation, which included being identified as the lead teachers of the pathways, counselors assigned to the pathways, and students identified as being in one of the three Linked Learning pathways.

The student sample consisted of LT-ELL students that were identified in the student information system (Power School) as enrolled in the Engineering, Multimedia, and Law Academies. However, another sample of LT-ELL students was also tagged as being enrolled in the academies, but not taking any CTE courses associated with the pathways. This study had a control and experimental group to compare research results.

The student sample originally consisted of two twelfth grade students from each of the Engineering, Multimedia, and Law pathways, for a total of six LT-ELL students identified as enrolled in the LL/CPA pathways and six LT-ELL non-pathway participants. However, only five non-pathway participants submitted the parent permission forms required for research participation. The eleven students participating in this study provided a sample large enough to conduct an analysis of whether LT-ELL students were accessing LL/CPA pathways. All students were offered the option of being interviewed in English or Spanish.

The non-academy group was selected based on four characteristics to ensure that a comparison group was matched to the academy sample. The matching design allowed

the researcher to compare groups that are similar (Cramer, 2006). Without similar groups, the differences in achievement may be influenced by other variables. To account for the initial differences, the career academy and non-academy groups were matched using four descriptive characteristics. The four characteristics were ethnicity, LT-ELL students, grade level, and gender. These four characteristics were selected because of the availability of the data and the researcher's ability to access this information.

The other qualitative samples were the three academy-lead teachers, the ELL guidance counselor, and the college and career counselor. The ELL students assigned to the guidance counselor were selected to participate in the study to answer the research interview questions on how ELL students are accessing LL/CPA pathways at USA High. The results from this study addressed the over-arching inquiry of how LL/CPA pathways provide access to LT-ELL students to achieve the goals of the CCSS as being college and career ready.

Data Collection Procedures

USA High administration identified the lead LL/CPA teachers responsible for the leadership of the Law, Engineering, and Multimedia pathways. The participants were responsible for teaching core and/or career-oriented curriculum and implementing innovative college and career readiness programs of study aligned to the LL/CPA pathways.

This mixed methods research had both quantitative and qualitative measures. The qualitative portion of the research addressed the inquiry of how LL/CPA pathways provide LT-ELL students access to college and career readiness standards by using qualitative interviews with LT- ELL students in the Engineering, Multimedia, and Law academies and LT-ELL students not taking academy courses at this high school. A list

of all ELL students identified as assigned in each of the three academies was generated and filtered by LT- ELL status tagged in the student information system and sorted by grade level. A list of all LT- ELL students by grade level for each of the three academies emerged. Next, all students schedules were evaluated to determine if they were actually enrolled in any career academy technical classes. Finally, these LT-ELL students were sorted into two categories: pathway participants and non-pathway participants. The interviews were conducted in English or Spanish as preferred by the students. The interview questions that were developed drew from the student engagement instrument adapted from Appleton and Christenson's (2004) Student Engagement Instrument (SEI), which measured students' beliefs of cognitive and psychological engagement from the perspective of the student (Appleton & Christensen, 2004). The interview questions solicited responses to address the research questions and were coded and transcribed according to common themes that emerged from the interviews using HyperResearcher as the data-gathering tool that was used to make general observations (Litchman, 2012).

Concurrent quantitative methods were used to examine data of academy and non-academy LT-ELL students, specifically the CAHSEE pass rates, grade point averages, CELDT scores, and credits earned toward graduation for Engineering, Multimedia, and Law. Data was collected and analyzed using HyperResearcher to examine differences in academic achievement and engagement between the career academy and the non-career academy group.

The other qualitative samples consisted of the three lead pathway teachers of the three academies, the guidance counselor, and the college and career counselor. The guidance counselor assigned to ELL students and the college and career counselor assigned to all students participated to answer the research interview questions on how LT-ELL students are accessing LL/CPA pathways at USA high. The results from this

study addressed the over-arching inquiry of how LL/CPA pathways provide access to LT-ELL students to achieve the goals of Common Core as being college and career ready.

Role	Pathway	Length of time as teacher/lead
Teacher A	Law Academy	10 years
Teacher B	Multimedia	17 years
Teacher C	Engineering	6 years

Table 4: Sub-Case Teachers: Three Linked Learning Lead Teachers of the Multimedia, Law, and Engineering Pathways

The three lead teachers were contacted by the researcher via email and personal calls for consent to participate in the research study. All three leads agreed to be interviewed at the high school; the location varied from conference rooms to classrooms. The researcher provided each teacher a consent form for signature prior to the audio interview. The Lead Pathway Teacher Interview Questionnaire (see Appendix A) was used to conduct one-on-one interviews in person with each lead teacher.

The researcher followed a consistent protocol and asked the same 10 questions of all three academy leads. The interview questions were used to answer the one research question and two operational questions. For clarification, the researcher provided the rationale for asking the questions that aligned to the research questions.

Rationale for the Research Questions

The rationale for the 10 questions of this study was the following:

1. How long have you (lead teacher) been teaching in the pathway? The question helped identify the lead's background, knowledge and skills in providing leadership to other teaching team members and students of the pathways.

2. What is the recruitment strategy of ELL students into the pathways? This question helped assess the specific strategies the leads used to recruit ELL students into the three pathways.
3. Do the pathway teachers have a philosophy about LT- ELL students in the pathways? This question helped identify the adult's philosophical position about ELL students in the pathways. Specific distinction was made regarding the ELD levels of the ELL students and whether the adult had a different philosophical position on the student's success based on the ELD level of the student.
4. Does the pathway program have a strategy to engage students? This question helped identify how engagement is defined and how social capital is developed in the pathway.
5. How does student engagement impact the students' ability to establish networks with peers? This question helped identify if social networks (student-to-student) are established in the pathways and how students are demonstrating engagement in the pathways.
6. Does the pathway address college and career readiness for students? This question helped identify how the pathways provide college and career readiness skills to students in the pathway.
7. How does the pathway teaching team support struggling students? This question helped address how the pathway team supports students that struggle with academics and behavior.
8. How does the pathway differentiate support for LT-ELL students? This question helped address the various strategies that pathway teachers use to differentiate instruction for LT-ELL students.

9. How often does the pathway team collaborate with the counseling department? This question helped address the level of collaboration between the members of the pathway and the counseling department.
10. How do the pathway teachers provide support to encourage persistence in participating in pathways for students? This question assisted in learning strategies pathway teachers used to encourage students' persistence in staying in the pathway.

Procedures to Answer Research Questions

The research questions were answered based on the guided interview questions of the teachers and their responses. All audio file interviews were transcribed into a text file using an outside professional transcription firm. Upon receipt of the text file, the individual text files of all teachers were uploaded into HyperResearcher for coding. HyperResearcher software allows for codes to be created based on groups or individual codes. For this study, the researcher identified individual codes that corresponded to each interview question.

HyperResearcher software program allows for various reports to be constructed. One such report is the frequency report that can be filtered by cases names and codes. The frequency report generated from HyperResearcher is organized by the lead teachers and college and career counselor. The researcher included the college and career counselor with the lead teachers in this report because several comments were made by the college and career counselor during the interview that responded to the research questions. In addition, the college and career counselor had been a teacher in the Multimedia pathway and assumed a leadership role in that pathway prior to becoming the college and career counselor at USA High.

The report builder module in HyperResearcher was used to generate the frequency responses of the sub-case members against the same groups of codes selected in corroboration to answer each interview questions. The various report builders are organized by case, code, frequency, and sources to gather data to address the research questions on what factors affect LT-ELL students in accessing LL/CPA pathways.

Appendix I, J, K and L illustrate the alignment of the codes used to gather data to support the responses that addressed the interview question.

<i>Learners and the College and Career Counselor</i>		
Role	Pathway they support	Length as a counselor
Counselor A	ELL and Engineering and Law	37 years
Counselor B	College and Career Center	6 years

Table 5: Sub-Case 2: Two Counselors-Guidance Counselor that Supports English Language

The ELL and the College and Career Counselor had 43 years of combined experience.

The rationale for the 10 questions of this study was the following:

1. How are ELL student's CELDT scores used to determine course placement?

This question helped identify practices or policies of how the ELL counselor uses the student's CELDT scores to determine course placements.

2. Are ELL students exposed to career academies for participation? This question helped identify if ELL students are given access to the career academies and under what conditions.

3. How long have you been the ELL counselor? This question helped identify the counselor's background, knowledge, and skills in providing counseling guidance to ELL students.
4. Do the pathway teachers collaborate with the counselors regarding the career academy programs? This question helped address the level of collaboration between the counseling department and the academy leads.
5. What criteria are used to determine ELL placement in academy programs? This question helped identify what factors impacted ELL placement in academies.
6. Are ELL students provided college and career readiness? How? This question helped determine if and how ELL students received information about college and career readiness.
7. What is the priority of ELD for ELL students? This question helped determine which policies or practices are used to determine the priority of the various ELD levels.
8. How often do you meet with ELL students to monitor progress toward graduation? This question helped assess the frequency of how often the counselor meets with ELL students regarding graduation status.
9. How are struggling ELL students supported? This question helped determine which strategies are provided to support struggling ELL students.
10. As a counselor, do you participate in the academy recruitment and/or selection of the student's participation? This question helped determine the level of partnership/collaboration in recruitment activities with the counseling department and the academies.

Sub-Case 3: Six LT-ELL Students in the LL/CPA Pathways

Role	Gender	Pathway	English Language Status	Birth Origin
Student A	M	Multimedia	ELD 5	USA
Student B	M	Multimedia	RFEP	USA
Student C	M	Law	ELD 5	USA
Student D	M	Multimedia	RFEP	USA
Student E	M	Engineering	ELD 5	USA
Student F	F	Engineering	RFEP	Mexico

*Sub-Case 4: Five LT- ELL Students Identified in the LL/CPA Pathways
(however not accessing the sequence of pathway courses)*

Role	Gender	Pathway	English Language Status	Birth Origin
Student A	F	Engineering	ELD 3	Mexico
Student B	F	Engineering	ELD 3	El Salvador
Student C	M	Engineering	ELD 2	El Salvador
Student D	M	Engineering	ELD 4	USA
Student F	M	Engineering	ELD 5	Guatemala

Table 6: Demographics of the LT-ELL Student Samples

Students were invited to participate in the interviews in early December 2015, however the meeting was held four days prior to winter break and no student permission forms were returned. Upon the start of the spring semester, the same list of potential students was used to mail home the permission form with an introduction explaining the need to have the permission forms signed and returned to the researcher. Upon receipt of the permission forms, the list of potential students was sorted by senior status, language status, academy participation, and gender. However, the number of participants weighted heavier with males than females. Once the signed permission slips were returned, the protocol of conducting the interviews took place at the high school. Students were sent call slips by the main office that directed them to report to a conference room for the individual interviews. Upon entry into the conference room, this researcher introduced the interview team (researcher and Spanish translator) and informed the participating

student that the parent permission forms to conduct the interview had been received. The interview questions were provided to the student so they could read along as the interview was conducted. At the beginning, the protocol was explained to the student that their name would not be shared and only general themes would be included in the findings. All interviews were recorded using an audio player. Students were asked if they would prefer to have the interview conducted in English or Spanish. All student interviews were conducted in English however, the researcher observed that some of the students were not comfortable communicating in English. Following the English interview with each student, the researcher asked if he/she wanted to conduct the interview in Spanish asking the same questions. Four of the six students completed both Spanish and English interviews, and two students only wanted to be interviewed in English. All the audio files were submitted for translation into English.

The rationale for the 10 questions of this study was the following:

1. At what age did you enter school in the United States? The question helped assess how long the students had been in U.S. schools.
2. Are you aware of Linked Learning academies at USA High? This question helped determine the student's awareness of the Linked Learning academies at the high school.
3. Are you enrolled in any certified Linked Learning Pathways (Engineering, Law, or Multimedia)? This question provided information if the student was aware that the academy he/she participated in was a certified Linked Learning pathway.
4. Does it make a difference to you to have your friends/peers enrolled in the academy? This question helped determine if having friends in the pathways was essential in developing the student's social capital by having peer networks.

5. If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness? This question helped to inform if students felt that their experience in the academy provided college and career awareness or readiness.
6. Do you know if you are meeting the CSU/UC college admissions requirements? This question helped to assess if the student knew about the A-G college admission requirements and was informed of their progress toward meeting the requirements.
7. Do you feel belonging to a pathway is preparing you in being college and career ready? This question helped assess if the student understood what college and career ready meant and if the pathway teachers provide information about college and career preparation.
8. Do the teachers in the pathway discuss college and career readiness? This question assisted in understanding if the student could recall events and/or conversations offered by the pathway teachers about college and career readiness.
9. What barriers have you encountered in accessing the pathway? This question helped understand if the student had experienced any barriers in accessing the pathway of their choice.
10. Do you feel supported and encouraged to continue pursuing a career in the industry sector related to your pathway beyond high school? This question helped assess if the student felt that they would continue studying this career path in the future.

Data Analysis Procedures

Creswell (2009) suggested a linear conceptual approach that recognizes the various stages that are interrelated where the data is organized and prepared for analysis. This research study was analyzed using HyperResearcher, which is a HyperCard-based application that allows for qualitative and quantitative analysis of text, graphic audio and video materials. For the purposes of this study HyperResearch was used to perform the following tasks (a) coding of text paragraph, these segments of text were assigned multiple codes, and (b) retrieval of coded materials (text, graphics, audio, and video segments), which enabled the researcher to organize all similarly coded material together. Fundamental to the data analysis was Boeije's (2002) Constant Comparative Model (CCM). A purposeful approach to analysis for qualitative research designs, CCM was used to review and reflect upon old and new material as data was collected (Boeije, 2002). CCM is a systematic, cyclical process that increases "the traceability of verification of the analyses" (Boeije, 2002, p. 391) to answer the stated research questions (Boeije, 2002). The step-by-step method for describing, labeling, coding, and comparing passages from the data sources is in alignment with Creswell's recommendations to establish a process of laying out the framework of data gathering (Creswell, 2009, p. 187). Creswell suggests that a researcher select the approach to data gathering to either (a) develop codes only on the basis of the emerging information collected from participants, (b) use predetermined codes and then fit the data to them, or (c) use some combination of predetermined and emerging codes. This researcher used a combination of predetermined and emerging codes that were derived from the interview questions to provide evidence of data to answer the research questions. A matrix was developed for each of the sub-cases, organized by the research questions and data codes. The data codes were organized by the sub-case groups' responses to the research question that illustrated

the general statements in responding to the research question. Finally, after narrowing the codes and responses to each, sub-case themes emerged from the responses to the research questions (see Table 7).

Emerging Themes from Data Sources	Key Areas	Alignment with Research Questions
Sub-case Teachers		
1. Conditional recruitment strategies of ELL students (ELD 5-RFEP)	Student recruitment	RQ1
2. Project based activities that created opportunities for student engagement	Student Engagement	RQ2 & RQ 3
3. Developed student network opportunities for students and adults	Student Networks	RQ 3
4. Designed activities and projects that provided college and career readiness opportunities for students	College and Career Readiness	RQ1 & RQ 2
5. Teachers sought out academic and behavioral resources and interventions that supported struggling students	Student Support	RQ1 & RQ 3
6. Decisions about collaboration with counselor(s)	Collaboration	RQ 1
7. Developing a personalized community of support in developing a sense of belonging and engagement for academy students.	Student Support	RQ 3
Sub-Case Counselors		
1. Some fidelity in following district's ELL placement practices	Student Support	RQ 1
2. Language barriers of ELL 1-4 students that do not speak English and teachers that do not speak Spanish	Student Recruitment	RQ 1

Emerging Themes from Data Sources	Key Areas	Alignment with Research Questions
3. Decisions about collaboration with teachers	Collaborations	RQ 1
4. Decisions on the academy placement criteria to enroll or withdraw student from academies	Student Support	RQ 1
5. Decision on how college and career readiness is provided for ELL 1-4's	College and Career	RQ 1
6. Conflict with student class schedules	Student Support	RQ 1
7. ELL 1-4's with ELD language acquisition classes		
8. ELL counselor monitored the progress toward graduation for ELL students	Student Support	RQ 1 & RQ 2
9. Decisions on how ELL 1-4 students are supported.	Student Support	RQ 1
Sub-Case ELD 5-RFEP		
1. Awareness of Linked Learning	Student Recruitment	RQ 1
2. Ability to develop networks	Student Networks	RQ 3
3. Exposure to College and Career Readiness	College and Career	RQ 2
4. Knowledge of post-secondary access	Student Support	RQ 2 & RQ 3
5. College & Career prepared	College and Career	RQ 2
6. Sense of support and engagement	Student Support	RQ 3
7. Encouragement to pursue options	Student Support	RQ 2 & RQ 3
Sub-case ELD 1-4		
1. Feeling disenfranchised	Student Support	RQ 1
2. Struggling with learning English	Student Support	RQ 1
3. Lack of access to academies	Student recruitment	RQ 1

Emerging Themes from Data Sources	Key Areas	Alignment with Research Questions
4. Lack of awareness of graduation requirements, less a-g admissions	Student Support	RQ 1
5. Class conflicts with ELD courses	Student Support	RQ 1
6. Conflict passing CAHSEE	Student Support	RQ 1

Table 7: Emerging Themes and Alignment with Research Questions

Process of How Codes and Themes Emerged

Sub-case teachers/career counselor statements provided various codes that emerged from each interview question. These codes were created for each interview question and assisted in establishing themes that emerged from the participant's statements. Seven categories emerged in the initial sorting of interview statements and were labeled (a) conditional recruitment strategies of ELL students ELD 5-RFEP; (b) project-based activities that created opportunities for student engagement; (c) developed student network opportunities for students and adults; (d) designed activities and projects that provided college and career readiness opportunities for students; (e) teachers sought out academic and behavioral resources and interventions that supported struggling students; (f) arbitrary decisions about collaboration with counselor(s); and (g) creating a personalized community of support in developing a sense of belonging and engagement for academy students.

Sub-case ELL and college career counselor statements provided various codes that emerged from each interview question. The following codes were created from the interview questions that assisted in establishing themes, which emerged from the participant's statements from the interview questions. These included (a) some fidelity in

following district's ELL placement practices; (b) language barriers of ELL 1-4 students that do not speak English and teachers that do not speak Spanish; (c) arbitrary decisions about collaboration with teachers; (d) arbitrary decisions on the academy placement criteria to enroll or withdraw students from academies; (e) arbitrary decisions on how college and career readiness is provided to ELL 1-4 students; (f) conflict with student class schedules and ELD language acquisition classes for ELL 1-4 students; (g) ELL counselor monitored progress toward graduation for ELL students; and (h) arbitrary decisions on how ELL 1-4 students are supported.

Sub-case ELD5-RFEP statements provided various codes that emerged from each interview question. The following codes were created from the interview questions that assisted in establishing themes, which emerged from the participant's statements from the interview questions. These included (a) awareness of Linked Learning academies; (b) ability to develop student networks and friendships; (c) importance of having friends in the academy to hold each other accountable; (d) various opportunities for exposure to college and career readiness; (e) knowledge about college admission requirements and ability to self-monitor progress; (f) college and career preparation for post-secondary opportunities; and (g) support and encouragement to pursue post-secondary options.

Sub-case ELL 1-4 student statements provided various codes that emerged from each interview question. The following codes were created from the interview questions that assisted in establishing themes, which emerged from the participant's statements from the interview questions. These included (a) feeling disenfranchised at high school; (b) students struggling to learn English; (c) lack of access to academies due to language barriers; (d) lack of awareness of graduation requirements for "a-g" admissions; (e) conflict of double ELD classes and not having enough room in their schedule to participate in academies; (f) aspirations to continue their learning; and (g) conflict in passing the CAHSEE.

For all sub-case groups the following protocol was established: (1) developed the interview questions for all sub-cases that aligned to the research questions (see Appendices A, B, C, and D); (2) developed the rational for asking the interview questions in order to gain broader understanding of the responses; (3) created codes that were aligned to the interview questions (see Appendices E, F, G, and H); (4) organized the interview questions with the responses that were aligned to the codes associated to that specific interview question (see Appendices I, J, K, and L); (5) developed the overarching themes for each sub-case (see Table 6); and (6) syntheses of the data identified the six key areas that were targeted for research that included (a) student recruitment, (b) student engagement, (c) college and career readiness, (d) support services, (e) student network development, and (f) collaboration. These six key areas were triangulated to answer the research questions.

Using the framework of CCM, the themes that emerged from each sub-case were compared to the core components of the Linked Learning approach. Linked Learning combines four elements designed to support student success (SRI International Report, 2014). These guiding principles are rigorous academics, real-world experiences, work-based learning, and personalized support. The triangulation of all the data sources supported the trustworthiness of the analysis, thus providing a balanced and authentic representation of the data. The findings from the various framework(s) to the Linked Learning guiding principles address the research question of (1) what factors affect LT-ELL students in accessing college and career readiness programs, (2) how a Linked Learning pathway provides access to college and career readiness for ELL students, and (3) whether Linked Learning pathways provide engagement, support, and a sense of belonging for ELL students, and if so, in what ways?

Assumptions

Research has demonstrated that certified Linked Learning pathways should provide (a) a challenging academic core curriculum, (b) real-world experiences by a combination of career and technical course work emphasizing the practical use of academic learning and preparing youth for high-skill, high-wage employment, (c) work-based learning through a range of opportunities to learn through meaningful real-world experiences, including internships, apprenticeships, and school-based enterprises, and (d) personalized support with academic and social support, such as counseling and additional instruction in reading, writing, and mathematics with the goal of helping all students succeed in and outside school (The California Center for College and Career, 2012ab; Linked Learning Alliance, 2014; Saunders, 2013; Stern et al., 2010).

Certified Linked Learning pathways have evidence to support the criteria of the four components that contribute to a quality pathway. Based on the literature review of this study, this researcher assumed that the certified LL/CPA pathways at this high school would implement these four pillars with fidelity.

This researcher also assumed that participants were truthful in their descriptions of their beliefs and experiences. This assumption was supported and tested to some extent by analyzing multiple sub-case studies, although the data collection represents a moment in time of the teaching, counseling, and English Language Learners learning experiences for each participant. Furthermore, the interviews were transcribed verbatim thus ensuring their accuracy.

Limitations

A limitation of the study may have been the selection of the three certified LL/CPA pathways (i.e., Engineering, Law, and Multimedia) at the same school. Another limitation may have been the years of experience of the lead teachers, the ELL counselor, and college and career counselor within the LL/CPA pathways. Although only interviews were used to gather data for the teachers and counselors, they represented a snapshot in time and may not represent the on-going, daily leadership role of an individual lead teacher participant or counselor. These limitations did not prevent a thorough examination of the research question under study because of the depth and abundance of data that was provided through the variety of data sources. Another limitation may have been the process of how the school administration designates CELDT classification in contrast to the ELD level placement.

Summary

This chapter includes a description of the concurrent mixed methods case study design using qualitative and quantitative approach to the research for this study. Selection of the participants was in alignment with the criteria that was established in identifying the key stakeholders. The process for data analysis was explained and inherent assumptions and limitations for this particular study were included. Chapter 4 provides an in-depth review of the data related to the research question and an explanation of how the themes support the findings for this study.

CHAPTER 4

RESULTS

The purpose of this case study was to examine if LT-ELL students accessed LL/CPA pathways to achieve the goals of CCSS of being college and career ready. In addition, this study examined the differences, if any, in student engagement, achievement, and access to college and career readiness standards between LT-ELL students participating in LL/CPA pathways and LT-ELL students not participating in LL/CPA pathways within the same high school. Factors of student achievement and engagement in the academies were measured in this study as they are foundational components that make up the structure of a career academy.

The researcher investigated differences of how the LL/CPA pathways provided access to LT-ELL students in becoming college and career ready and how the pathways provided student engagement, with support, and a sense of belonging.

For this study, the researcher identified the three certified LL/CPA pathways of Law, Multimedia, and Engineering at USA High as programs of study that provide college and career readiness. Six key areas were targeted for research. These included (a) student recruitment, (b) student engagement, (c) college and career readiness, (d) support services, (e) student network development, and (e) collaboration. This chapter provides a detailed description of the data obtained and analyzed by the researcher. Additionally, the chapter includes the complete results of the data analysis from this research study.

This chapter is divided into three sections. The first section provides the research design and rational of the concurrent mixed methods for this study, including the

selection process for potential participants as meeting the criteria of participating in a LL/CPA pathway and data collection procedures.

Research Design

Based on the methodology described in Chapter 3, this researcher used concurrent mixed methods of qualitative and quantitative measures to investigate in-depth factors that either enhance or impede LT-ELL students in accessing the LL/CPA pathways. In concurrent mixed methods the researcher converges or merges qualitative and quantitative data in order to provide a comprehensive analysis of the research problem (Creswell, 2009). This researcher used the sequential exploratory strategy for the mixed methods design that offers a strong qualitative data collection and analysis, followed by a second phase of quantitative data collection and analysis that builds on the results of the qualitative phase. The researcher conducted the first phase of the qualitative data collection by interviewing all the participants and then having the audio files transcribed into text files. These text files were then uploaded to HyperResearcher to develop the frequency of the themes followed by the quantitative data collection of the students. The researcher acquired quantitative data results from the CAHSEE pass rates in English and math, the CELDT rates, grade point averages, and credits earned toward graduation, for the LT-ELL students in the Engineering, Multimedia, and Law pathways and the non-pathway LT-ELL group. Grade point averages were analyzed in this study by comparing LT-ELL students in Engineering, Multimedia, and Law pathways against the LT-ELL non-pathway students identified in this study.

This chapter provides a description of the study including the profiles of the four sub-cases of participants, findings and themes from the data analysis related to and organized by the research questions, unanticipated findings not related to the research

questions, and a summary of the findings. This study used the sequential exploratory strategy for a mixed methods design which had a strong qualitative data collection and analysis of the interviews. This was followed by a second phase of quantitative data collection and analysis of the students' achievement data that built on the results of the first qualitative phase. The intent of this sequential exploratory design study was to assess whether the certified LL/CPA pathways provided access to LT-ELL students to achieve the goals of the CCSS as being college and career ready.

The qualitative nature of this study generated findings that portray participants' perceptions, actions, beliefs, and behaviors related to their leadership roles in leading an academy or providing guidance counseling. The two student sub-cases portrayed their perceptions, actions, beliefs, and behaviors related to being college and career ready.

Profiles of Sub-case Groups

This collective case study focused on four sub-cases of participants that met the criteria for inclusion. They were: three lead teachers of the Engineering, Law, and Multimedia pathways; two counselors, one assigned to ELL students and the college and career counselor; six LT-ELL students classified as ELD 5-RFEP participating in LL/CPA pathways; and five LT-ELL 1-4 students not participating in LL/CPA pathways.

Findings for Research Question One (RQ1)

What factors affect LT-ELL students in accessing college and career readiness?

Data analysis that supports findings for RQ1 provides a comparison of participants' perceptions about the eligibility of LT-ELL student participation in the LL/CPA pathways. In addition, comments and reflections related to the challenges and

successes of providing college and career readiness were identified as answers to RQ1. The interview questions (see Appendices A, B, C, and D) were designed to disclose participants' perceptions of the differences (if any) between LT-ELL students in the LL/CPA pathways and LT-ELL students not participating in LL/CPA pathways. Interviews with participants were the primary source of data.

LL/CPA pathway lead teachers, counselors, and students all identified (a) student recruitment, (b) college and career readiness, (c) student support, and (d) collaboration, as key factors that affect LT-ELL students in accessing college and career readiness programs.

Student Recruitment into the LL/CPA Pathways

Recruitment strategies varied depending on time of the year. Overall, the strategies were systematic and school wide in nature. Since the feeder middle school to USA High has "houses" that are organized into small learning communities in Engineering, Law, and Multimedia, this makes recruiting a targeted event.

All three leads shared that the following strategies were the main activities for recruitment (a) visiting the middle school that has the house system to recruit students, (b) sending current academy students to the talk with the middle school students to share experiences and get them to consider applying to a specific academy, (c) conducting presentations (recruitment fairs) in the small theater, and (d) developing activities during the recruitment fair that are engaging. Teacher A shared that each student develops a fingerprint card and attaches the fingerprint to the back of their nametag to keep as a memento. In addition, Teacher A emphasized that they tell the students that there is a lot of writing and public speaking in the Law academy. "This way a student knows what is expected of them" (Teacher A, personal communication, January 8, 2016). Teacher

B shared that in Multimedia they use visuals (cameras, screens, video, and lights) to showcase the Multimedia academy. Teacher A shared that when the “students were brought to assembly, they would watch videos about what kids do in our academy, and power points and stuff, so they would get a visual context of what happens there” (Teacher A, personal communication, January 8, 2016). Teacher C shared that every spring they go to the middle school that has an Engineering academy. They target students who have an interest and experiences in Engineering and encourage them to continue participating in the Engineering Academy at the high school. However, all three leads indicated that there are no specific strategies to recruit ELL students.

A distinction was made that LT-ELL students classified as ELD 5-RFEP were eligible to be recruited into the academy programs. ELD 5-RFEP students indicated that they were aware of the LL/CPA pathways. ELD 1-4 students were not recruited to participate in the LL/CPA pathways due to language barriers and schedule conflicts with ELD classes. Teacher A stated that “ELL 1, 2, and 3 students rarely take academy classes, the academic language is too hard” (personal communication, January 8, 2016). However, ELL 1, 2, and 3’s take CTE classes to graduate, but not in the LL/CPA pathways. This distinction was made by the career counselor who stated that all students take CTE classes to meet the graduation requirements for elective credits.

The ELL counselor concurred that the language barriers of ELL 1-4 students that do not speak English and teachers that do not speak Spanish are a constant barrier for ELL 1-4 students in the LL/CPA pathways. Another obstacle is that ELL 1-4 students need to take some bilingual classes and they are not offered in the academy. According to the ELL counselor, students need to take bilingual classes where possible or be placed in “nice” teacher classrooms (personal communications, December 18, 2015). Nice teacher means that the ELL counselor schedules ELL students into nice teacher’s classrooms that will work with the students and not exclude them due to language barriers. In

addition, ELL 1-4 students need ELD classes and often are taking double ELD classes and cannot enroll in the LL/CPA pathways even if they wanted to. An overarching understanding among the academy leads is that conditional recruitment strategies of ELL students continues to be a consistent practice of selecting only ELD 5-RFEP students for participation in LL/CPA pathways.

An anomaly occurs when the ELL counselor enrolls ELL 1-4 students in the Engineering and Multimedia academies because he feels that the students do better with hands-on activities and they are less academic. This creates a disproportionate number of ELL 1-4 students in the Engineering and Multimedia academies. Teacher C stated that ELL 1-4 students were not placed equitably in all pathways and that Engineering had more ELL students than the other pathways. The ELL counselor mentioned that he prefers to place students where teachers speak Spanish, and currently the Engineering academy has Spanish-speaking teachers.

College and Career Readiness

Academy lead teachers designed activities and projects that provided college and career readiness opportunities for students. Examples of these activities consisted of college tours to expose students to college campuses and campus life. One hundred percent of the ELD 5-RFEP students mentioned that teachers are constantly discussing being ready and competitive for college. A school wide advisory committee was developed to assist students in focusing on college and career readiness. An objective of the advisory is that academy teachers teach students how to analyze their transcripts for “a-g” completion. The academies conduct progress checks with students and assist LL/CPA pathway students with how to self-monitor their grades and credits needed for college admissions. This awareness of the LL/CPA pathways provides advantages for

academy students as they are exposed to numerous college and career opportunities. In addition, mentors play a significant role in assisting Engineering academy students with “what real world Engineering is really like” and offer support to students (Teacher C, personal conversation, December 16, 2015). Teacher B stated that he informs the Multimedia students about the pitfalls of taking remediation classes in college. All three leads encourage their students to pursue college and careers after high school. The Law academy has former graduates return to participate on panel discussions on college life and what students need to get into college. Teacher C stated that the Engineering students shadow college students in their lectures and study commons areas and “this gives them a feeling about what college feels like and it will not be too scary when they go off to college” (Teacher C, personal communication, December 16, 2015). ELD 5-RFEP students stated the following about being prepared for college - teachers bring in people from universities to give presentations about college, they feel the exposure to the academies makes them college potential, and teachers are preparing them for college by letting them pace themselves. Teacher C stated that they need to teach the students that in college, no one will be watching over them and nagging them to get to class or get their work done. Some students indicated that they are already college students because they are either taking college course at the community college or are enrolled in dual credit Law classes.

For ELD 1-4 students, the ELL counselor makes arbitrary decisions on how college and career readiness is provided. He cites the conflict of student class schedules with the required ELD language classes that ELL students need to take for English acquisition. In addition, the ELL counselor advocates for ELL students to get their certificate of completion, which counts for community college.

Student Support

Student services consist of academy teachers supporting struggling students by addressing academic, behavior, and attendance immediately. Teacher C stated:

they know that there's someone that's keeping tabs on them, whether it's their previous teachers from last year, sometimes a teacher they don't even have yet, but because they are in the academy they know about them. They know that there's someone who's keeping track of what they're doing (Teacher C, personal communication, December 16, 2015).

Teacher A stated, “they need to have that supportive environment where they see their teachers as people who all want them to succeed” (personal communication, January 8, 2016). As part of the advisory, the career counselor intervenes on behalf of students that are struggling in using their learning plans and she assists them with adjustments in course work or seeks out community organizations for interventions. According to Teacher C:

If a student is having struggles in class, they try to have interventions with teachers that they have in the academy... one on one. Besides the behavior interventions, the academic interventions consist of scaffolding a lot! Breaking down writing assignment into really simple small parts, and then going back and putting it all together—this is really-really good for EL students. (Personal communication, December 16, 2015).

Teacher B shared another intervention strategy when he described that during the monthly Multimedia academy meetings, the academy teachers end with a check in about issues concerning struggling students. This check in provides follow up steps

with the adults and students. The college and career counselor shared that when she was teaching in the Multimedia academy, they created a motto of “Everyone walks the stage to graduate” (personal communication, January 13, 2016). This was meant to encourage students.

Collaboration Practices

Collaboration practices of the lead teachers and the ELL counselor are marginal or non-existent. Teacher C stated “that only at the beginning of the school year, is there contact with the ELL counselor about schedule changes for academy students” (Teacher C, personal communication, December 16, 2015). Lead teachers felt that the ELL counselor made arbitrary decisions without discussion on the academy placement criteria to enroll or withdraw students from academies. Teachers A and B stated that there is no collaboration with the ELL counselor and the ELL counselor also stated that there is no collaboration with the academy leads. Teacher A stated that the “ELL counselor has absolutely no interest in what academies do” (personal communication, January 8, 2016). Teacher B stated that “the ELL counselor isn’t worth our while to work with” (personal communication, January 13, 2016). However, the college and career counselor collaborates with the three leads weekly. All academy leads indicated that they collaborate frequently with other guidance counselors and the college and career counselor.

Findings for Research Question Two (RQ2)

How do Linked Learning pathways provide access to college and career readiness for English Language Learners?

Findings for operational RQ2 further describe strategies of how college and career readiness is provided to LT-ELL students. LL/CPA pathway lead teachers, counselors, and ELD 5- RFEP students all identified (a) student engagement, (b) college and career readiness, and (c) student support as key factors that affect LT-ELL students in accessing college and career readiness programs. Reflective statements provided in this section relate to participants' perceptions of how college and career readiness is being provided to ELL students in the LL/CPA pathway settings. In RQ1, it was explained that ELD 1-4 students were not recruited to participate in LL/CPA pathways due to language barriers and schedule conflicts with double ELD classes. Therefore in RQ2 the student group identified pertains to ELD 5-RFEP students only.

Student Engagement

RQ1 discussed the recruitment event activities that provided a level of engagement for students. The findings for RQ2 explored an in-depth review of the activities that built persistence, engagement, and confidence. All three academy leads shared best practices of how they engage students in becoming self-directed learners as they are exposed to what it takes to be college and career ready.

Teacher A indicated that alumni are invited to talk with the academy students about college or careers. Students are engaged in the presentations and are provided small group meetings to discuss college culture with alumni. "The alumni explain to the kids, and they do a better job of it, why college is important, and that it is possible" (Teacher A, personal communication, January 8, 2016). ELD 5-RFEP students indicated that the pathway teachers are constantly reassuring them that college is within their grasp and to follow their dreams.

Academy teachers and students shared that they are connected with each other and encouraged to work together to build teamwork. Students act as coaches to help and hold each other accountable for their projects, e.g., e-bike, mock trials, video productions, etc. Project-based learning is a featured practice in the LL/CPA pathways. Teacher C stated that they “try to do as many hands-on projects for them because they know a lot of the students coming into the Engineering academy from the middle school, and they like hands on stuff” (Teacher C, personal communication, December 16, 2015). In addition, project-based activities create opportunities for student engagement.

College and Career Readiness

As Teacher A stated, “it seems that all we do... inform, inform, inform the students about college and careers” (personal communication, January 8, 2016). During the school wide advisory the college and career counselor organizes activities to show students how to research college programs they would be interested in studying. The students create a career poster that is hung on the classroom walls as a reminder of their goals. Teacher B, the lead in the Multimedia academy, shared that “media arts have transferrable skills to almost every job you have because we are such a media-rich society” (personal communication, January 13, 2016).

All three academy leads shared that college tours are a great opportunity for students to gain first-hand experience so they can “feel” what it would be like to be on that college campus. Students shared that academy teachers talk about college and careers all year long. One student indicated that being in the academy has made him college ready and he is taking concurrent college courses while in high school.

Student Support

Academy teachers indicated that they can identify struggling students quickly and intervene with support. The environment is like a family; the students in the academy watch out for each other and at times they share concerns with teachers about a peer that is showing signs of struggles. Another way that support is provided to students is through differentiated support. Teacher C indicated that,

All of our students, they're English Learners; I think the strategies that we use every day in our teaching, are good for all of them. Using a lot of visuals, graphic organizers, sentence frames are good teaching strategies used that are good for English Learners and for all of our students. (personal communication, December 16, 2015).

Various strategies are implemented by the academy teachers and student peers to provide a sense of support for struggling students who are experiencing academic and /or behavior issues.

Findings for Research Question Three (RQ3)

Do Linked Learning pathways provide engagement, support, and a sense of belonging for English Language Learners, and if so, in what ways?

Reflective statements provided in this section relate to participants' perceptions and descriptions of LT-ELL ELD 5-RFEP students feeling engaged, supported, and having a sense of belonging in the LL/CPA pathways. In RQ1, it was explained that ELD 1-4 students were not recruited to participate in the academies due to language barriers

and schedule conflicts with double ELD classes. Therefore, the student group identified in RQ3 pertains to ELD 5-RFEP students only.

Student Network

The academy leads repeatedly stated that the academy is like a family environment where the adults in the program are “watching” out for the students. Teacher C shared that students are not only developing networking skills among themselves, but also with adults. As an example, the Engineering academy students participated in a college tour of UC Davis Engineering School where the students networked with college students. The Law academy invites former students to participate on alumni panels. Current Law academy students network with alumni to gain an understanding of law-related careers from their perspective.

Teacher C stated that academy programs organize the project-based learning ventures to form working teams that engage students to participate on the projects. This teaches them how to network and depend on each other. One ELD student stated, “teams hold each other accountable when working on teams and that it is fun” (Student D, personal communication, March 9, 2016). The Multimedia lead shared that it is not unusual to have students come into the Multimedia lab during lunch to hang out or work on projects. The Engineering lead mentioned that the students participate in e-bike competitions where the students build an electric bike and test its performance at an after school competition. The teams work so closely together that they develop working group networks. Teacher C stated that they remind students of the need to learn how to network with other people. Teachers remind students that when they go to other places it is not just “oh fun, we’re going to be out of school but think of how the student presents him or herself” (Teacher C, personal communication, December 16, 2015). The college

and career counselor stated that the students look out for each other and if they think someone is messing up they try to work with them to insure their homework is completed and turned in. Students stated that it matters to have friends in the pathway and that they motivate each other. The adults create opportunities for students to develop networks.

Student Support

Student support is evident at multiple stages. Belonging to a pathway helps the students feel supported through camaraderie. Teachers and students create an attitude through academy mottos. For example, the Law academy motto is *we're Law, and in Law we do this our way*. Multimedia's motto is *everyone walks the stage*. Students mentioned that academy classrooms are safe and relaxed places to hang out. The overarching sense of caring adults provides for a family supportive environment. Academy teaching teams meet regularly to discuss student success or the need to watch a specific student that may be exhibiting behavior that requires adult intervention. The student-teacher relationship is a foundational anchor in supporting students. Teachers are in constant communication regarding opportunities where students can participate. Consistent communication is used persistently to encourage students to develop the study habit of taking responsibility for their learning by completing their homework and submitting it on time.

Student Engagement

The Engineering and Multimedia academies are more hands on and students tend to engage more with projects. Law tends to be "more academic" and has more components of reading, writing, and public speaking. Even in the Law academy, teachers are constantly instilling in students that their work is a team effort (teacher and student),

that they will not fail and everyone is in this together. Students shared that it makes a big difference to have their friends in the academy because they are studying the same thing and they can help each other. One student stated, “my teachers and peers support and encourage me that is why I’m going to college” (Student E, personal communication, March 8, 2016). The ELD 5- RFEP students stated that they know their teachers care about them and they are more engaged in school due to their support. Confidence was another indicator of success for students. Students stated that they are knowledgeable of postsecondary options and are encouraged to pursue these opportunities.

Summary of Findings Related to RQ1

Findings from this study showed participants’ perceptions, beliefs, role, and function differ from one another when identifying the factors that affect LT-ELL students in accessing college and career readiness programs. The four general ways include student recruitment, college and career readiness, student support, and collaboration. The findings for RQ1 are summarized below.

Student Recruitment

Findings revealed that participants had differences of opinions and beliefs when it came to LT-ELL students and which level of ELD could have access and gain the benefits of being in a LL/CPA pathway. The ELD 5-RFEP students that participated in the LL/CPA pathways indicated that they felt supported and engaged as participants in the academies. These students were seen as ambassadors of the academies and participated in promotion activities to recruit rising students into the academies. Due to the recruitment

exclusion of the ELD 1-4 students, they were prohibited from participation in the LL/CPA pathways.

College and Career Readiness

Academy teachers provided college and career readiness activities to ELD 5-RFEP students through a variety of strategies. These included classroom discussions on college and career readiness, college field trips, mentors assigned to students, and teaching students how to assess their own transcripts for “a-g” admissions eligibility. ELL 1-4 students are provided minimal exposure to college and career readiness. As an example, ELL 1-4 students were escorted by the ELL counselor to the career center to meet with the college and career counselor for college advisement. One hundred percent of the ELL 1-4 students shared that they were not aware of what college and career readiness meant and had no exposure to college information. Furthermore, ELL 1-4 students did not know how to evaluate their high school transcripts for high school graduation progress and had no knowledge of the “a-g” admission requirements.

Student Support

Student support was defined by the academy teachers as intervening quickly when academy students showed signs of struggle. Academy teachers formed teams that involved other guidance counselors, the college and career counselor, and sometimes parents to design a plan to address the student’s needs. Academy teachers shared that the instructional practice involved substantial scaffolding during instruction to assist students in understanding the reading and writing components of the assignments. All three lead teachers indicated that scaffolding is a great instructional strategy and they used it

frequently with ELL students in the LL/CPA pathways. Frequent exposure to the career center also supported academy students in learning about various colleges and what courses were needed to gain admission. Academy students shared that they felt supported and encouraged to think big and set their sights on greatness. They were cautioned that college is not high school and they need to develop good habits to complete their program of study. For ELD 1-4 students, support was mainly provided by the ELL counselor and some “nice” teachers that the ELL counselor negotiated with in placing ELL 1-4 students in their classrooms.

Collaboration

Evidence showed that there was a lack of collaboration between the ELL counselor and the three lead LL/CPA pathways teachers. Academy teachers did collaborate with the college and career counselor and other guidance counselors in addressing issues affecting the students in the LL/CPA pathways. Evidence showed that collaboration meetings with the academy leads and the college and career counselor occurred weekly, and during quarterly advisory the college and career counselor was seen more frequently.

Summary of Findings for RQ2 and RQ3

Findings for RQ3 delineate if LT-ELL students are engaged, supported, and have a sense of belonging when participating in the LL/CPA pathways. Lead teachers, counselors, and ELD 5- RFEP students identified (a) student engagement, (b) student networks, and (c) student support as key factors that provide LT-ELL students with the social capital needed to develop networks in and out of school. Many of the relevant

features in the findings for RQ2 are included in the responses for RQ3 and are under the heading of Student Network, Engagement, and Student Support.

Student Engagement

This summary explored an in-depth review of the activities that built persistence, engagement, and confidence. All three leads shared best practices of how they engage students in becoming self-directed as they learn more about what it takes to be college and career ready. Students shared that they received ample information about college and what it takes to be successful once they arrive on a college campus. This sense of being “ready” was corroborated by the teachers when they taught the students how to self-regulate and be proactive in pursuing college and career readiness skills.

College and Career Readiness

In addressing RQ2, “how” students gain access to college and career readiness was the focal point of this summary. Students conduct research on various colleges and careers. They complete an educational plan via the school wide advisory activities, which are provided by the college and career counselor. These activities inform the students about the specific admission criteria or pre-requisites for colleges and careers.

Student Support

Scaffolding academic language is another strategy that is used often by the academy teachers. Teacher A shared that in the Law academy students are given an academic word to research and determine if its root is Greek or Latin and how it can

be used in the context of law and if Spanish cognates can be used for understanding. Teacher B stated that the Multimedia academy largely uses visual vocabulary “so they can also watch what we do as we demonstrate and usually even if they don’t know the terminology, they can perform the tasks” (personal communication, January 8, 2016).

Scaffolding academic language and/or teaming students together, supports emerging English speaking students with peers that know more about a specific activity and can assist with communication and projects.

Analysis of Sub-case groups

Using the CCM method of synthesizing codes, the following six key areas were targeted for research (a) student recruitment, (b) student engagement, (c) college and career readiness, (d) support services, (e) student network development, and (f) collaboration. Table 8 illustrates the frequency of each key indicator that emerged from the sub-cases responding to the research questions.

	Research Question 1	Research Question 2	Research Question 3
Student Recruitment	X		
Student Engagement		X	X
College and Career Readiness	X	X	
Student Support	X	X	X
Student Networks			X
Collaboration	X		

Table 8: Frequency of Key Areas Related to Research Questions

These six key areas were triangulated to illustrate the perceptions, actions, beliefs, and behaviors of the sub-cases participants. The Academy leads and counselor’s behavior

was in alignment with their leadership role. The student's behavior was in alignment with being college and career ready.

The study resulted in a wide range of findings from the data analysis process and it suggests a number of important considerations based on the participants' perceptions of their experience in the LL/CPA pathway environment. Findings for all data sources revealed the following insights related to the three research questions for this study.

Findings suggested that adult participants differ in their manner of collaboration when it pertained to academy functions and LT-ELD 1-4 student counseling needs. Differences included the ways participants communicated regarding counseling functions such as class changes, taking students out of academy classes to enroll in a graduation requirement course, and placing LT-ELD 1-4 students in the Engineering and Multimedia academy based on arbitrary opinions/perceptions that these academies are more hands on and engaging than the Law academy. The minimal or lack of collaboration between the ELL counselor and the academy leads had a direct impact on the level of access and support for LT-ELL 1-4 students in accessing LL/CPA pathways. This exclusion prevented LT-ELL 1-4 students' engagement in the three certified Linked Learning pathways of Engineering, Multimedia, and Law, thus, not having information about college and career readiness.

Findings suggested that ELD 5-RFEP students did perceive that the LL/CPA pathways provided access to college and career readiness. Furthermore, ELD 5-RFEP students felt that they were college ready based on the on-going support from academy teachers, college tours, having industry mentors to guide them, having the skills to self-evaluate their transcripts to assess postsecondary options, and building social capital in learning how to network within school and outside of school.

Table 9 illustrates the data indicators for the two sub-cases of students that participated in the study. A significant finding in the student data is that eight out of

eleven (73%) of the students would not have been eligible to graduate from high school due to not passing either portion of the CAHSEE ELA or CAHSEE Math of the exit exam. In 2015, Governor Brown signed Senate Bill 725, which removes passing the CAHSEE for the class of 2015 (Harrington, 2015). Currently California is developing another exit exam that will be aligned to CCSS.

Another data point, taken from both sub-cases of students, is in the category of credits earned toward graduation where 91% of the LT-ELD 1-4 and LT-ELD 5-RFEP students have enough credits to graduate from high school. Currently, one ELD 5 student is below the threshold of acquiring the needed 45 credits to meet the graduation requirement. USA High offers credit recovery programs but it is unclear if this student is participating in this program.

As illustrated in Table 9, the grade point average of the LT-ELL students in both sub-cases was statistically insignificant with a differential of .15 grade point average marking the difference.

	CAHSEE ELA/ CAHSEE Math	GPA 9-12 weight	CELDT score/level	Credits earn toward graduation
Student A	Not passed/ Passed	3.2	1-Beginner	217/225
Student B	Not passed/ Not passed	2.4	1-Beginner	205/225
Student C	Not passed/ Passed	2.1	1-Beginner	195/225
Student D	Not passed/ Not passed	1.8	4-Early Advanced	200/225
Student E	Not passed/ Passed	3.3	1-Beginner	190/225
ELD 5 –Reclassified Student Data Indicators				
	CAHSEE ELA/ CAHSEE Math	GPA 9-12 weight	CELDT score/level	Credits earn toward graduation
Student A	Not passed/ Not passed	1.6	RFEP	180/225
Student B	Not passed /Not passed	1.08	3-Intermediate	177/225
Student C	Not passed/ Not passed	2.6	4-Early Advanced	235/225
Student D	Passed/Passed	3.6	RFEP	210/225
Student E	Passed/ Passed	3.1	RFEP	217/225
Student F	Passed /Passed	1.8	5-ELD	220/225

Table 9: ELD 1-4 Student Data Indicators

Summary of Differences

The research revealed many disparities in how LT-ELD 5-RFEP and LT-ELL 1-4 students were provided access to the LL/CPA pathways. Table 10 illustrates significant differences centered on the six key indicators.

Key Indicators	ELD 5 and Reclassified	ELD 1-14
Student recruitment	<ul style="list-style-type: none"> ✓ Eligible to be recruited into the academy programs. ✓ Aware of the Linked Learning academies. ✓ Students were seen as ambassadors of the academies and participated in promotion activities to recruit rising students into the academies. 	<ul style="list-style-type: none"> ✓ Not recruited to participate in the academies due to language barriers and schedule conflicts with ELD classes. ✓ Rarely take academy classes, the academic language is too hard” For ELD 1-4’s, ✓ Had no knowledge about Linked Learning academies.
Student Engagement	<ul style="list-style-type: none"> ✓ Students that participated in the CPA academies indicated that they felt supported and engaged as participants in the academies. 	<ul style="list-style-type: none"> ✓ They were prohibited from participation because they were not recruited
College and Career Readiness	<ul style="list-style-type: none"> ✓ Academy lead teachers designed activities and projects that provided college and career readiness opportunities for students. Examples of these activities consisted of college tours to expose students to college campuses and campus life. ✓ This sense of being “ready” was corroborated by the teachers as wanting to teach the students how to self-regulate and be proactive in pursuing college and career ready. ✓ Career Academy students are taught to evaluate their transcripts with the ✓ expectation they will go to college. 	<ul style="list-style-type: none"> ✓ ELL counselor makes arbitrary decisions on how college and career readiness is provided. He cites the conflict with student class schedules with the required ELD language acquisition classes that ELL students need to take for English acquisition. ✓ The ELL counselor advocates for ELL students to get their certificate of completion, which counts for community college. ✓ Provided minimal exposure to college and career readiness. ✓ Students shared that they were not aware of what college and career readiness meant nor had exposure to colleges. ✓ Students did not know how to evaluate their high school transcripts for high school graduation progress nor any knowledge of what a-g admission requirements were.
Support Services	<ul style="list-style-type: none"> ✓ Academy teachers intervened quickly when academy students showed signs of struggle. They formed teams that involved other guidance counselors, a college and career counselor, and sometimes parents to design a plan to address the student’s needs. ✓ Scaffolding academic language strategy used often by the academy teachers. 	<ul style="list-style-type: none"> ✓ The ELL counselors concurred that the language barriers of ELL 1-4 students that do not speak English and teachers that do not speak Spanish are a constant barrier for ELL 1-4 students in accessing academies. ✓ Another obstacle is the need to take some bilingual classes and they are not offered in the academy.

Key Indicators	ELD 5 and Reclassified	ELD 1-14
Student network development	<ul style="list-style-type: none"> ✓ The academy leads repeatedly stated that the academy is like a family environment where the adults in the program are “watching” out for the students. ✓ Academy programs organize the project-based learning ventures to form working teams that engage students to participate on the projects. This teaches them how to network and ✓ depend on each other. 	<ul style="list-style-type: none"> ✓ None
Collaboration	<ul style="list-style-type: none"> ✓ There is no collaboration between the ELL counselor and the three lead teachers. 	<ul style="list-style-type: none"> ✓ Academy teachers did collaborate with the college and career counselor and other guidance counselors in addressing issues surrounding the students in the academy ✓ Adult participants differ in their manner of collaboration when it pertained to academy functions and ELD 1-4 students counseling needs. Differences include the ways participants communicated regarding counseling functions such as class changes, taking students out of academy classes to enroll in a graduation requirement course, and placing ELD 1-4 students in the Engineering and Multimedia academy based on arbitrary opinions/ perceptions that these academies are more hands on and engaging than Law. ✓ The minimal or lack of collaboration between the ELL counselor and academy leads had a direct impact on the level of access and support for ELD 1-4 students in accessing Linked Learning pathways. ✓ Exclusion prevented ELD 1-4 students’ engagement in the three certified Linked Learning pathways of Engineering, Multimedia, and Law, thus, not having information about college and career readiness.

Table 10: Summary of Differences for Pathway and Non-Pathway LT-ELL Students

Chapter 5 presents a discussion of the research findings from Chapter 4 relating to the literature review and discusses how the findings align with the theoretical framework presented in Chapter 2. Chapter 5 also offers areas for future research.

CHAPTER 5

DISCUSSION

The implementation of the CCSS in 2015, requires states to design college and career readiness anchor standards to be embedded throughout all content courses in order to provide more success for students in the transition from high school to either postsecondary education or the workforce. Substantial evidence has been provided to support the claim that career academies continue to be a successful reform strategy for high schools. Career academies are designed to integrate core content courses with a career/technical course related to an industry sector. This integration of core and career/technical themed courses provides students with opportunities to refine their career readiness skills as they participate in work-based learning.

Throughout this study, the literature review discussion illustrates the importance and benefits of providing all students with college and career readiness skills. Students benefit when they are prepared for college without the need for remediation and when they are prepared to be competitive in the various industry sectors.

A goal of the CCSS is that all students will be college and career ready upon completion of high school. At the secondary level, LT-ELL students are required to take ELD courses to increase English language proficiency to access core academic courses. This paradox creates a barrier for LT-ELL students as they are taking the needed English language acquisition courses to learn English, yet do not have space in their daily course schedule to participate in the LL/CPA pathways.

Purpose

The purpose of this case study was to examine if LT-ELL students accessed LL/CPA pathways to achieve the goals of CCSS of being college and career ready. In addition, this study examined the differences, if any, in student engagement, achievement, and access to college and career readiness standards between LT-ELL students participating in LL/CPA pathways and ELL students not participating in LL/CPA pathways within the same high school. Factors of student achievement and engagement in the academies were measured in this study, as they are foundational components that make up the structure of a career academy. This chapter presents a discussion of the research findings and is divided into two sections. The first section provides an overview of the study and summary of the findings. The second section includes observations and recommendations.

Overview of the Study

The problem for this study is positioned in exploring how the LL/CPA pathways provided access to LT-ELL students in becoming college and career ready and how the pathways provided engagement, support, and a sense of belonging for students. Research suggests that LT-ELL students have been unsuccessful in accessing quality core and technical curriculum that is college and career specific and provides the successful transitions to postsecondary education/career options (Olsen, 2010). In addition, this study illustrated the complexities that LT-ELL students face as they strive to acquire English language proficiency while enrolled in ELD courses at the secondary level. English language acquisition skills are needed for ELL students to acquire English language proficiency. Francis et.al, (2006) argues that ELL students must have skills in

mastering academic language in order to understand rich academic text. Additionally, ELL students must know how to analyze and comprehend written text in English in order to communicate effectively.

At the high school level, LT-ELL students find themselves in a conflict as they are learning English in ELD courses to increase their acquisition of the English language. This conflict is created when LT-ELL students are not able to access programs like the LL/CPA pathways that have the potential to expose them to college and career readiness skills.

Throughout this research study, the connection was made that the LL/CPA pathways in Engineering, Multimedia and Law that completed the Linked Learning certification would adhere to the four foundational pillars of a quality pathway for all students. However, evidence shows that ELD 5-RFEP students have access to the LL/CPA pathways, while ELL 1-4 students are denied access and the benefits of college and career readiness.

This case study examined four sub-cases comprised of the three lead teachers of the Engineering, Multimedia, and Law academies, the ELL counselor, the college and career counselor, six LT-ELL students in LL/CPA pathways, and five LT-ELL students not participating in LL/CPA pathways.

The student sample consisted of LT-ELL students that were identified in the student information system (Power school) as enrolled in the Engineering Partnership Academy (EPA), Multimedia Academy, and Law Academy. However, another sample of LT-ELL students was also tagged as being enrolled in the academies, but not taking any CTE courses associated with the pathways.

The student sample consisted of two twelfth grade students from each of the Engineering, Multimedia, and Law pathways. This resulted in a total of six LT-ELL students (identified as enrolled in the pathways) and five LT- ELL student randomly

selected as non-pathway participants for student samples from each of the three academies for a total sample of eleven twelfth grader students (six in academies and five non-academies).

This study was a concurrent case study using mixed methods research of qualitative and quantitative measures. The qualitative nature of this study generated findings that portray participants' perceptions, actions, beliefs, and behaviors related to their leadership roles in leading an academy or providing guidance counseling. The two student sub-cases portrayed their perceptions, actions, beliefs, and behaviors related to being college and career ready.

Data resources included qualitative analysis of the interviews for all participants, which were the three academy lead teachers, the two counselors, and the eleven students. In addition to the qualitative analysis of the student sample interviews, the research looked at quantitative data sources from the CAHSEE pass rates, grade point averages, CELDT rates, and credits earned toward graduation for the Engineering, Multimedia, and Law Academy, and the non-academy ELL group. This study suggested a number of important implications based on the participants' perceptions of how LT-ELL students become college and career ready.

Summary of Findings

Six key themes emerged from the data analysis (a) student recruitment, (b) student engagement, (c) college and career readiness, (d) support services, (e) student network development, and (f) collaboration. These six key themes were triangulated to answer the perceptions, actions, beliefs, and behaviors of the sub-cases participants. The focus of the perceptions, actions and beliefs for the academy leads and counselor's was on their

behaviors related to leadership of the academy. The perceptions, actions and beliefs of the student's behavior focused on their perception of being college and career ready.

The study resulted in a wide range of findings from the data analysis process and suggests a number of important considerations based on the participants' perceptions of their experience in the LL/CPA pathway environment. Findings for all data sources revealed the following insights related to the three research questions for this study.

This study found that adult participants differ in their manner of collaboration when it pertained to academy functions and ELD 1-4 student counseling needs. Differences included the way participants communicated regarding counseling functions such as class changes, taking students out of academy classes to enroll in a graduation requirement course, and placing ELD 1-4 students in the Engineering and Multimedia academy based on arbitrary opinions/perceptions that these academies are more hands on and engaging than the Law academy. The minimal or lack of collaboration between the ELL counselor and the academy leads had a direct impact on the level of access and support for ELD 1-4 students in accessing LL/CPA pathways. This exclusion prevented ELD 1-4 student engagement in the three certified Linked Learning pathways of Engineering, Multimedia, and Law resulting in not having information about college and career readiness.

Another significant finding was that the lead teachers made a distinction those LT-ELL students that were classified as ELD 5-RFEP were eligible to be recruited into the academy programs. ELD 5- RFEP students indicated that they were aware of the Linked Learning academies and had favorable perceptions that they were college and career ready. LT-ELD 1-4 students were not recruited to participate in the academies due to language barriers and schedule conflicts with ELD classes. In addition, the academy lead teachers perceived that the academic language would be too hard for ELD 1-4 students and discouraged them from the pathways. Due to this exclusion, LT-ELD 1-4 students

shared they felt disenfranchised by the school and did not have the knowledge and skills to pursue postsecondary options.

The quantitative data gathered and compared to each sub-case of students illustrated that both sub-case student groups remained similar in findings. Findings suggested that the ELD 5-RFEP students did perceive that the LL/CPA pathways provided access to college and career readiness. Furthermore, ELD 5-RFEP students felt that they were college ready based on the on-going support from academy teachers, college tours, having industry mentors to guide them, having the skills to self-evaluate their transcripts to assess postsecondary options, and building social capital in learning how to network within school and outside of school.

A significant finding in the ELD 5-RFEP and ELD 1-4 students data revealed that eight out of eleven (73%) of the students would not have been eligible to graduate from high school due to not passing either portion of the CAHSEE in ELA or math.

Another finding taken from both student sub-cases in the category of credits earned toward graduation revealed that 91% of the ELL 1-4 and ELD 5-RFEP students had enough credits to graduate from high school. Currently, one ELD 5 student is below the threshold of acquiring the needed 45 credits to meet the graduation requirement, however the school does offer credit recovery programs but it is unclear if the student is participating in this program. Grade point average for both sub-case student groups showed that the difference in grade point average was .15, which is very similar in achievement.

Implications of Theoretical Framework

This study builds on the theoretical framework presented by Stern et al. (2000) that career academies help students develop successful support networks that are

fostered by institution agents (academy teachers) that model success. Concha (2001) concurs with Stern et al, and emphasizes that institutional mechanisms (administrators, teachers, and counselors) have a direct effect on Latino engagement. Further studies by Stanton-Salazar (1997) found that optimism-based social capital identifies that student engagement builds and sustains peer networks. Stanton-Salazar supports that Latino engagement is fostered in networks within a school as a source of social and cultural capital.

Implications of Study

The following observations were based on the findings of this study. First, identifying which factors affected LT-ELL students in accessing college and career readiness programs was paramount. This study measured the perceptions, beliefs, knowledge and skills of two sets of LT-ELL students. One group classified as ELD 5-RFEP was recruited to participate in the LL/CPA pathways. The other group of LT-ELL students classified as ELL 1-4 was excluded for participation due to language barriers. What became apparent was that the ELL students were sub-divided into classifications that determined eligibility for participation base on language issues and barriers.

Second, all parties confirmed the marginal or lack of collaboration between the ELL counselor and the three academy leads. The academy leads created a system of working around the ELL counselor and not working in partnership. All three leads took it upon themselves to seek out other support staff, such as other guidance counselors and the college and career counselor, for assistance. The lack of collaboration and/or willingness to collaborate created a deficit model of support for ELL 1-4 students. Since ELD 5-RFEP students were in the pathways, they received the services and gained valuable skills in accessing college and career readiness. When institutional decisions

exclude students from participating in programs based on the student's language skills, the results are devastating to students and discriminatory in practice. Educational programs are designed to close the academic achievement gap and special consideration needs to be extended to marginalized student populations that are often overlooked or not considered for participation. In this case study there is substantial evidence that when adult behaviors interfere in the collegial delivery of service for LT-ELL students, the casualty will be the LT-ELL students who experience the minimal service.

Third, arbitrary decisions were made to recruit LT-ELL students that were classified as ELD 5-RFEP into the academy programs. ELD 1-4 students were not recruited to participate in the academies due to language barriers and schedule conflicts with ELD classes. Teachers perceived that ELL 1, 2, and 3 students rarely took academy classes because the academic language was too hard. However, ELL 1, 2, and 3 students took CTE classes to graduate, but not in the academy program. This distinction was made by the career counselor who stated that all students take CTE classes to meet the graduation requirements for elective credits. Due to this exclusion, ELD 1-4 students shared that they felt disenfranchised by the school and did not have the knowledge and skills to pursue postsecondary options.

Fourth, ELD 5-RFEP students perceived they were college and career ready. The student's perception of being college and career ready was through the constant reinforcement by the academy teachers and the college and career counselor that the students were college ready. Academy students were able to demonstrate their analytical skills in self-evaluating their high school transcripts to assess their graduation progress. However, the paradox for the students was that the perception of being college and career ready was not totally based on the reality of being college and career ready. As an example, the findings illustrate that 73% of the student samples would not have graduated if the CAHSEE was still required for graduation. Another example is the academy

student who stated he was college ready because he was already taking a course at the community college. However, the course was a remediation course needed for high school graduation.

For the ELL 1-4 students the CAHSEE continued to pose a barrier as 100% of the students would not have been eligible to graduate from high school. This concern was widely shared by the ELD 1-4 students as a barrier in exiting high school.

Fifth, building social capital, networking and stimulating student engagement are attributes in building and sustaining peer networks. Stanton–Salazar (1997) defined social capital as the aggregate of the actual or potential resources embedded in the social network that may be converted into other manifestations of capital, which can increase engagement and develop social networks that are supportive for students. The California Center for College and Career (2012ab) indicted that career academies serve as a subset of an educational institution and supporting evidence indicated that career academies aim to function as a “community of practice: for students and teachers” (The California Center for College and Career, 2012ab, p. 3). For students, such support includes the personalized attention they get from their teachers, their teachers’ expectations, their classmates/peers level of engagement in school, and the opportunity they have to collaborate with peers on school projects.

Sixth, findings from this study presented evidence that the three certified LL/CPA pathways of Engineering, Multimedia, and Law provide a program of study that is in alignment with the Linked Learning principles of having a challenging academic core curriculum, world experience career technical classes, work-based learning opportunities, and personalized support with academy students.

Recommendations

This study revealed the existence of policies or practices that sub-divide the LT-ELL students by ELD acquisition levels. These practices or school site policies determine group eligibility for recruitment and participation in the LL/CPA pathways. ELL 1-4 students are not eligible to participate due to language issues and barriers. A recommendation is to integrate language acquisition skills and techniques into content and technical courses that build English proficiency, thus providing access to the LL/CPA pathways.

Administrators, teachers, and counselors act as gatekeepers that can either contribute to student failure or success based on the collegial relationship of the adults. This study found that stakeholders need to develop collegial practices of professional conduct that includes, communication, collaboration, teamwork, and alliance building that models the development of social networking. When adults model collegial partnerships with each other, students learn how to form social networks by example. This research concurs with other scholars that when students are taught how to build social capacity, they develop peer networks that support their successful transitions in and out of school.

Engagement was found to be a critical component of LT-ELL students participating in the LL/CPA pathways. Involving ELD 1-4 students in pre-academy models would enhance participation and engagement in pathways while developing English language skills. LT-ELL student involvement in pathways would provide access to college and career readiness.

As students are exposed to college and career readiness strategies, it is recommended that a process or procedure be developed and implemented to provide all students with assistance of understanding and determining their actual status of

being college and career ready. Developing a process of awareness is critical to ensure students' perception of being college ready is in alignment with their actual knowledge of being on target to graduate and progress to the next level of education or career.

Student networks are critical for Latino students in developing their capacity for building a circle of critical friends. Networking within and outside of school provides opportunities and exposure to college and career readiness. Career academies provide the opportunity to cultivate and create social networks. It is recommended that networking opportunities be provided for LT-ELL students to assist in the development of support and motivation for building capacity to form peer networks.

This study identified a conflicting practice for LT-ELL students that are scheduled in multiple ELD courses to develop their English proficiency and their lack of access to LL/CPA pathways. It is recommended that LL/CPA courses explore the development of contextualized instruction in the core content and technical courses. Students could learn how to integrate language acquisition as they are enrolled in LL/CPA pathways regardless of ELD classification.

Conducting a policy audit of the school site and district practices to ensure that the policies and practices being implemented in providing language acquisition for secondary LT-ELL students are not in conflict with opposing programs of study that offer college and career readiness for students.

Finally, a recommendation for future study is using a larger sample of LT-ELL students to determine if similar access and equity issues preclude them from participating in programs similar to LL/CPA college and career readiness programs.

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APPENDIX A

Pathway Teacher Interview Questions

1. How long have you been teaching in the pathway?
2. What is the recruitment strategy of ELL students into the pathway?
3. Do the pathway teachers have a philosophy about long term ELL's in the pathway?
4. Does the pathway program have a strategy to engage students? Share an example
5. How does student engagement impacts the students' ability to establish networks with peers?
6. Does the pathway address college and career readiness for students?
Share example
7. How does the pathway teaching team support struggling students?
Share example
8. How does the pathway differentiate support for Long-term Ell students?
9. How often does the pathway team collaborate with the counseling department? Share examples
10. How do the pathway teachers provide support to encourage persistence in participating in pathways for students?

APPENDIX B

Long-Term English Language Learners Interview Questions

Adopted from Student Engagement Instrument (SEI)

1. At what age did you enter school in the United States?
2. Are you aware of the Linked Learning Academies at USA High School?
3. Are you enrolled in any of the Linked Learning pathways (Engineering, Law and Multimedia.)?

If yes, which pathway?
4. Does it make a difference to you to have your friends/peers enrolled in the academy? Why?
5. If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness?
6. Do you know if you are meeting the CSU/UC college admissions requirements?
7. Do you feel belonging to a pathway is preparing you in being college and career ready?
8. Do the teachers in the pathway discuss college and career readiness?
9. What barriers have you encountered in accessing any pathway?
10. Do you feel supportive and encouraged to continue pursuing a career in the industry sector related to the pathway beyond high school?

APPENDIX C

Student Questions Translated to Spanish

1. ¿A qué edad empezó la escuela en los EEUU?
2. ¿Está usted informado/a de la Academia Linked Learning en la secundaria USA?
3. ¿Está usted registrado/a en uno de los programas de Linked Learning (Ingeniera, leyes, multimedia)?
Si esta registrado/a, ¿en cuál programa?
4. ¿Le importa que algunos de sus amigos/amistades estén registrados en una de las academias? ¿Por qué?
5. ¿Si esta registrado/a en una de las academias, usted siente que la academia le da una ventaja en saber más sobre el colegio y carreras?
6. ¿Sabe si usted está satisfaciendo los requisitos de matrícula para los colegios CSU/UC?
7. ¿Siente usted que ser parte de una de las academias lo prepara para empezar el colegio o una carrera?
8. ¿Los maestros/as en las academias discuten/hablan sobre la preparación para el colegio y las carreras?
9. ¿Cuáles obstáculos ha encontrado en el acceso a las academias?
10. ¿Se siente apoyado/a y animado/a a continuar en una carrera después de la secundaria en el sector de la industria relacionado con una de las academias?

APPENDIX D

Counselor Interview Questions

1. How are ELL students CELDT scores used to determine course placements?
2. Are ELL students exposed to the career academies for participation?
3. How long have you been the ELL counselor?
4. Do the pathway teachers collaborate with the counselors regarding the career academy programs?
5. What criteria are used to determine ELL placement in academy programs?
6. Are ELL students provided college and career readiness? How?
7. What is the priority of English Language Development (ELD) for ELL students?
8. How often do you meet with ELL students to monitor progress toward graduation?
9. How are struggling ELL students supported?
10. As a counselor, do you participate in the academy recruitment/selection of student participation?

APPENDIX E

Alignment of Data Sources with ELL Counselor/Career Counselor Research Questions

Research Questions	Alignment of code
1. How are ELL students' CELDT scores used to determine course placement?	CELDT scores used for course placement Conflict with course placement
2. Are ELL students exposed to the career Academies for participation?	Barriers Conflict with course placement Exposure to career academies Support struggling students
3. How long have you been the ELL counselor?	Length as counselor
4. Do the pathway teachers collaborate with the Counselors regarding career academy programs?	Collaboration with counselors
5. What criteria are used to determine ELL placement in academy programs?	Conflict in course placement Criteria used to determine ELL placement
6. Are ELL students provided college and career readiness?	College and Career readiness ELL access
7. What is the priority of English Language Development (ELD) for ELL students?	Course Placement
8. How often do you meet with ELL students to monitor progress toward graduation?	Monitor progress toward graduation
9. How are struggling ELL students supported?	Criteria used to determine ELL placement Support struggling students
10. As a counselor, do you participate in the academy recruitment/selection of student participation?	Conflict with course placement Criteria used to determine ELL placement

APPENDIX F

Alignment of Data Sources with Teacher/Career Counselor Research Questions

Research Questions	Alignment of code
1. How long have you (lead) been teaching in the pathway?	Length in pathway recruitment
2. What is the recruitment strategy of ELL students into the pathways?	Participant in pathway Strategies to recruit ELL students
3. Do pathway teachers have a philosophy about LT- ELL's in the pathways?	Philosophy about LT-ELL's Equity in ELL placement in pathways ELL access Conflict for ELL's in pathways
4. Does the pathway program have a strategy to engage students?	Engaged students Teacher-student relationships
5. How does student engagement impact student's ability to establish networks with peers?	Network Teacher-student relationship
6. Does the pathway address college and career readiness?	College and career readiness College going culture College and career awareness Exposure to college
7. How does the pathway teaching team support struggling students?	Support struggling students Intervention support Monitoring progress toward graduation
8. How does the pathway differentiate support for LT-ELL students?	Differentiated support Scaffolding academic language
9. Collaboration	Collaboration with counselor Collaboration with college and career counselor Relationship with others
10. How do the pathway teachers provide support to encourage persistence in participating in pathways for students?	Networks Engage students Belonging

APPENDIX G

Alignment of Data Sources with ELD 5 and RFEP Students

Research Questions	Alignment of code
1. At what age did you enter school in the US?	Age
2. Are you aware of the Linked Learning academies at USA High School?	Enrolled in pathways Knowledge of pathways
3. Are you enrolled in any certified Linked Learning pathways (Engineering, Law Multimedia)?	Enrolled in pathways Knowledge of pathways
4. Does it make a difference to you to have friends/peers enrolled in pathways?	Developing Networks Feeling support and engaged
5. If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness?	College and Career Readiness Pursuing careers pathways
6. Do you know if you're meeting the CSU/UC college admissions requirements?	Knowledge of A-G requirement Monitoring of progress Accessing Career Center
7. Do you feel belonging to a pathway is preparing you in being college and career ready?	College and Career Readiness Teacher support
8. Do the teachers in the pathway discuss college and career readiness?	Teacher support
9. What barriers have you encountered in accessing the pathways?	Needing to help family
10. Do you feel supportive and encouraged continue pursuing a career in the industry sector related to the pathway beyond high school?	Pursuing career pathway Teacher support

APPENDIX H

Alignment of Data Sources with Long Term ELL 1-4 Students

Research Questions	Alignment of code
1. At what age did you enter school in the US?	Age
2. Any prior educational experiences	Prior educational experiences
3. Are you aware of the Linked Learning academies at USA High School?	Barriers to pathways Knowledge of pathways
4. Are you enrolled in any certified Linked Learning pathways (Engineering, Law or Multimedia)?	Enrolled in pathways
5. Does it make a difference to you to have friends/peers enrolled in pathways?	Developing Networks Feeling support and engaged
6. If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness?	College and Career Readiness Pursuing careers pathways
7. Do you know if you're meeting the CSU/UC college admissions requirements?	Knowledge of A-G requirement Monitoring of progress Accessing Career Center
8. Do you feel belonging to a pathway preparing you in being college and ready?	College and Career Readiness Teacher support
9. Do the teachers in the pathway discuss college and career readiness?	Teacher support
10. What barriers have you encountered accessing the pathways?	Needing to help family Barriers to passing CAHSEE
11. Do you feel supportive and encouraged to continue pursuing a career in the industry sector related to the pathway beyond high school?	Pursuing career pathway Teacher support Aspirations

APPENDIX I

Analysis of Lead Teachers/Career Counselor Research Questions

RQ1: How long have you (lead teacher) been teaching in the pathways?

Code: Length of time as a teacher/lead

Teacher A	10 years
Teacher B	17 years
Teacher C	6 years
College and Career Counselor	6 years as counselor and 6 years as co-lead

The three lead teachers and college and career counselor had 45 years of combined experiences. With 45 years of combined experiences, the knowledge and skills in providing leadership to other team members and/or students is evidence that the pathway adheres to the Linked Learning Pillars of what makes a quality pathway.

RQ2: What is the recruitment strategy of ELL students into pathways?

Codes:

Strategy to recruit ELL students

- Visit middle school that has Engineering program
- Send current Engineering students to talk with Middle Schoolers
- HS students share experiences with middle school students
- Similar program at middle school, attracts students to Engineering
- Conduct presentations (recruitment faire) in small theater
- Develop activities (develop fingerprints cards) activities that are interesting

- Don't hide that there's lots of writing and public speaking in Law
- No specific activities to recruit ELL students into pathways
- Recruit using presentations that are visual (camera, screens, videos and lights)

RQ3: Do the pathway teachers have a philosophy about Long term ELL's in the pathways?

Codes:

Philosophy about LT-ELL's

- All of our students are Ell's, prepare them for life after high school
- Inform them of the skills they are going to need
- Expose them to various Engineering fields
- Computers are a great draw for EL, Multimedia is hands on
- Good instructional strategies work for all students, not just ELL's
- Scaffolding, breaking down writing assignments helps the students with structure
- Hands on stuff, everyone love that
- Hard for ELL's in Law academy, however they are supported
- Multimedia classes tend to be easier to engages ELL students

Equity in ELL placement in Academies

- ELL student not placed equability in all pathways
- Engineering has more ELL students than the others (teachers speak Spanish)
- ELL student placed in Engineering, however they may not be interested in Engineering
- ELL 1, 2, and 3's rarely take academy classes, the academic language too hard
- ELL 1,2, and 3's take CTE classes to graduate, but not in Academy program

- Engineering and Multimedia are more hands on and less academic, it's easier for ELL's

ELL Access

- Keep an open mind to law enforcement and not just law
- If doing just law, ELL without a linguistic background would have a hard time
- Harder for ELL 1-3's to participate in Academies due to extra ELL classes
- ELL's can't meet the English A-G requirement

Conflicts for ELL in pathways

- Law is the worst academy for ELL's, because it's so language oriented
- Law does not have ELL's 1-3's, if and ELL 4 is enrolled the teachers use lots of scaffolding
- Law is little more difficult for EL's to access due to it being more academic than Multimedia and Engineering

RQ4: Does the pathway program have a strategy to engage students?

Codes:

Engaged Students

- Students in academies are connected with each other
- Encourage student to work together to build team work
- Student act as coaches to help each other or leader of a team
- Students form their own group to compete in the ebike competition
- Students are taught how to behave outside of school with mentors
- Working on a project with a common goal
- Networking with college students and learning how to interact with each other
- College tours and students learn to interact with college engineering students

- Student learn to make a social network around common projects

Teacher-Student relationships

- Monitor students interactions with others and teacher
- Teacher encourages students to team up with other students to form other networking groups

RQ5: How does student engagement impact the student's ability to establish networks with peers?

Codes:

Networks

- Student engagement teaches the students how to work together on projects
- Creates a family support environment
- Student participate in college trips and form groups out of interest
- Students encourage each other to do better on competitions
- Students work on project together and celebrate the team's success
- Students learn how to form networks
- Students learn to look out for each other, they are accountable to each other

Teacher –student relationships

- Teachers encourage student to communicate outside of class time
- Teachers create a sense of responsibility with student to help students finish their projects

RQ6: Does the pathway teachers address college and career readiness for students?

Codes:

College and Career Readiness

- Teacher address behavior issues in class and remedy them on the spot

- College tours to expose students to college campuses and campus life
- Mentors assist in what the real world of Engineering is really like
- Lots of discussion about college all year long
- Developed a school wide advisory that focuses on college and career readiness
- Teaching students to analyze their transcripts for A-G completion
- Academies conduct progress checks with students
- Course completion evaluations and recommendations for college courses

College going culture

- Constant discussion about being ready for college and be competitive in college
- Discussing the pitfalls of remediation classes
- College and career center organizes college events
- Exposure to college students to hear their stories about college
- Teachers encourage students to pursue college going culture
- Career center offers several college advising programs
- Offering dual credit courses in Law

College and career awareness

- Discussion about transferable skills in media arts
- Career exploration and what courses are needed to succeed in that career
- Former graduates come back to the school and participate on panel discussion

RQ7: How does the pathway teaching team support struggling students?

Codes:

Support struggling students

- Identify students that need support via tutoring
- Academy teachers address academic, behavior and attendance struggles

- Teacher-student conferencing with as many academy teachers and student to develop a plan, by team and one to one approach
- Use google docs to upload plan and monitoring

Intervention support

- Career counselor intervenes with students on their learning plans
- Meet with parents to support students
- Refer students to the Care team for support

Monitoring progress toward graduation

- Academy teachers intervene with students that are struggling
- Academy teachers monitor academic progress
- Consistent encouragement to “walk the stage” to graduate

RQ8: How does the pathway differentiate support for Long-term ELL students?

Differentiate support

- Use of visuals and graphic organizers
 - Use of sentence frames to assist ELL's in organizing their thoughts
 - What's good for ELL's is good for everyone-Everything is differentiated
- Understanding that all students in academies are English Learner

Scaffolding academic language

- Struggle with writing and teachers scaffold their instruction
- Academic words- student look up the word and definition
- Teach grammar and sentence structure word
- Teach students if the root word is Greek or Latin, and any Spanish cognates for understanding

RQ9: How often does the pathway team collaborate with the counseling department?

Codes:

Collaboration with ELL counselor

- Lack of collaboration with ELL counselor
- Beginning of year schedule changes of Ell students only

Collaboration with other guidance counselors

- There is collaboration with other guidance counselors
- Counselors are involved in pathway meetings pertaining to a struggling student

Collaboration with College and career counselor

- Developed school wide advisory period that addresses college readiness
- Communicate weekly with Pathway leads
- Sharing college advising with leads

RQ10: How do the pathway teachers provide support to encourage persistence in participating in pathways for students?

Codes:

Belonging

- Make the student feel that their “everyone in it together”
- Creating an attitude that you’re in an Academy – “We’re law, we do this”
- Classroom is a relaxed and safe place to hang out in
- Caring adults that are working with students
- Provide a family support environment

Engage students

- Possible lack of engagement in the Law academy lost 50% of the 9th graders and they don't know why—may not have been interested in Law Academy and were placed in that pathway by counselor
- Participating in service learning projects
- Exposure to activities that engage students
- Provide motivation speeches to engage students in the pathways
- Lots of hands-on work with students
- Engaging courses for students
- Working with mentors on a specific project and developing networks

Networks

- Bring back Alumni to network with students about college or careers
- Working on teams and participating on projects
- Friends gather in the Academy classrooms during lunch
- Students are accountable to each other and build on team work

Student-teacher relationships

- Constant communication regarding opportunities the students can participate in
- Encouragement to fill out applications for internships etc. and monitoring them
- Relentless communication to persist
- Constant communication about college and career readiness Meet with students to encourage them to turn in homework and “build habits” for doing the work

- Constantly working with students that it's a team effort (teacher and students) that they will not fail, everyone's in this together.

APPENDIX J

Analysis of ELL and Career Counselor Research Questions

RQ1: How are ELL students CELDT scores used to determine course placement?

Codes:

CELDT scores used to determine course placement

- Initial RAP center placement scores informs the school on which ELD level the student is place
- Prescribed ELD courses sequence, they have two ELD classes
- ELD 1, 2 or 3 A and B
- ELD 4's take an ELD course and an English class (counts toward A-G)
- All other core course are offered to ELL students

Conflict with course placements

- Conflict when a student arrives without much education
- Math and Science earlier to place verses Law and English
- Conflict over monitoring the graduation requirements of academy students
- Counselor taking students out of academy classes to make up a graduation requirement
- Some bilingual classes not offered in the academy, ELL students need to take bilingual classes where possible
- Some CTE classes are perceived easier for ELL's (Engineering and Multimedia) more hands on

RQ2: Are ELL students exposed to the career academies for participation?

Codes:

Language Barriers

- Non-Spanish speaking teachers in academy programs for ELD 1's and 2's and 3's
- Due to no real bilingual classes, ELL students are placed in "nice" teachers classroom
- ELD 1, 2, and 3's do not enroll in academies they have to take a double English class
- ELD 4's need support and may be taking academy classes
- Conflict with course placement
- Hard to place in academies when they have a 2nd and 3rd grade education level
- Exposure to career academy program
- ELL 1,2, and 3's know about the academies, however not enrolled
- Support for struggling students
- Buddy a ELD student with a fluent Spanish and English speaker in class

RQ4: Do the pathway teachers collaborate with the counselors regarding the career academy program?

Codes:

Collaboration with counselors

- Very little collaboration exist with the ELL counselor and pathway leads
- Only at the beginning of the school year does one lead arrange to have students moved in or out of academy classes
- Some pathway leads collaborate with other guidance counselors, not the counselor assigned to the Engineering or Law Academy
- Pathway leads collaborate weekly with the college and career counselor

- ELL counselor collaborates well with the college and career counselor

RQ5: What criteria are used to determine ELL placement in academy programs?

Codes:

Conflicts with course placement

- Previous educational experiences in home country
- Low level of education, due to war or poverty conditions
- Law academy has higher academic language needs than other academies
- Academy recruitment of ELL students must be ELD 5's or reclassified FEP
- Counseling arbitrary decisions to enroll or withdraw students due to graduation requirement needs of students in academies
- ELL's do better in Engineering and Multimedia due to hands on activities and not so intense with verbal and written English needs
- Criteria used to determine ELL placement
- Criteria to enroll in academies does not apply until an ELL student is classified a ELD 4 or 5
- Counselor feels that Math is a good indicator of the potential to going to college, he places ELD 1, 2, and 3's in Engineering CTE classes
- Counselors places majority of ELL students in Engineering and Multimedia
- ELL students are placed in groups in academies to offer support for ELL students

RQ6: Are ELL students provided college and career readiness?

Codes:

College and career readiness

- Counselor advocates for ELL students to get their certificate of completion, that counts for community college

- Career Center provides school wide advisory to students, however the presentations are made in English
- All students have a learning plan based on the quarterly school wide advisory
- College and career center provides numerous college presentations for students
- ELL access
- Anti-immigration policies impacting ELL's access to college
- School wide SAT exams are not given for ELL 1's, 2's or 3's

RQ7: What is the priority of English Language Development (ELD) for ELL students?

Code:

Course Placement

- Counselor places ELL students in “friendly” English teachers classrooms
- If ELD levels are 1's, 2's or 3's the student take ELD classes (double classes)
- Lack of ELD teachers creates the need for English teachers to teach ELD

RQ 8: How often do you meet with ELL students to monitor progress toward graduation?

Code:

Monitoring progress toward graduation

- ELL counselor sees all his ELL students at least once a year
- The priority are 12th grade ELL student, the students are seen quarterly then the rest of the students in lower grades
- Monitoring graduation requirements and if needed schedule changes are made, which could mean that students are taken out of academy classes to fulfil a graduation requirement
- College and Career Counselor assist students in enrolling in the local community college to take courses to meet graduation requirements

- College and career counselor encourages students to sign up for different college and career events
- Academy leads teach students to evaluate their transcript to assess the A-G graduation rates

RQ9: How are struggling ELL students supported?

Codes:

Criteria used to determine ELL placement

- ELL 1-3's are placed with teachers that provide extra support for struggling students
- To support ELL students in math, most are placed in Engineering due to Spanish speaking teacher

Support struggling students

- ELL students that are struggling in academy classes take tutoring and afterschool support
- Calls home to alert parents of concern with work performances
- ELL counselor groups ELL students to support them in classroom with willing teachers
- Teachers pair ELL students with English speaking students to support the English language acquisition for ELL students

APPENDIX K

Analysis of ELL 5 and RFEP Students Research Questions

RQ1: At what age did you enter school in US?

Code: Age:

- All six students entered school at 5 o 6 years old

RQ2: Are you aware of Linked Learning Academies at USA High School?

Code: Knowledge of pathways

- All six students were aware of the Linked Learning Programs

RQ3: Are you enrolled in any Linked Learning Pathways?

Code: Enrolled in pathway

- All six students identified that they were enrolled in a pathway

RQ4: Does it make a difference to you to have friends/peers enrolled in the academy?

Codes: Developing networking with other students

- Yes, it matters to have friends in the pathway
- Makes a huge difference to have friends
- It's very important, because they help me with my work
- Yes, it is easy because we can help each other in a lot of stuff
- It's important to make friendships, they motivate you

Code: Feeling support and encouragement

- Makes a big difference by helping out, they're studying the same kind of things

- Friends are there when you need them
- Friends helps you improve on stuff you want to do
- You know what you're going to be something in life when you out of high school
- My teachers and peers, support and encourage me

RQ 5: If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness?

Code: College and Career Readiness

- My teacher brings in people from the universities to gives us presentations in Multimedia
- Yes, the pathway exposes the kind of stuff that I would want to learn later on in college
- Our teachers tells us how we are going to get into college and the steps I have to take to get in
- Yes, the exposers to the academies makes us college potential
- The teachers are always talking about college and preparing us to go to college
- Teachers are preparing us to go to college by letting us pace on our own
- Yes, teachers explain a lot about college, what classes to take
- I'm prepared to go to college, I'm taking a college course now
- The career counselor and teachers prepare us for college and make us do research on the kind of jobs we like
- Teachers also tells us not to get stuck on money for college, just plan well

RQ6: Do you know if you're meeting the CSU/UC college admissions requirements?

Code: Knowledge of A-G requirement

- Yes, our teachers are always telling us about the A-G requirement
- One student had difficulty remembering what this requirement was
- Students knew where they stood with the requirements

Code: Accessing the Career Center

- Career center makes us do research on careers
- Career center counselor is knowledgeable about colleges and helps us
- Career counselor also comes in my classes and talks about A-G requirements

Code: Monitoring of progression toward graduation

- Teachers are always trying to get us to see things from another point of view
- Teachers are always telling us about graduation... it's what they do
- I like learning about multimedia and my teachers are always looking out for me
- Our career counselor makes us go through this process to check on our credits
- Checking your credits helps develop the path to your future

Code: Teacher Support

- All my teachers are always telling me how college is and it's a good thing for me
- Most of my teachers telling me to follow my dream and just be myself
- They always talking about college, being prepared for it, how to get into college and any help that you might need to get in
- Because of the academy, I'm in college now
- Some of my teachers are difficult, hard to understand but they explain it a lot , how thing work out
- I feel my teachers and also my peers, they support and it's encouraging me

RQ7: Do you feel belonging to a pathway is preparing you in being college and career ready?

Code: College and Career Readiness

- Yes, my classes are preparing me for college
- It definitely does, it exposes the kind of stuff that I would want to learn later on in college
- Yes, it helps build up what you love to do
- My teachers support us a lot

RQ8: Do the teacher in the pathway discuss college and career readiness?

Code: Teacher Support

- All my teachers are telling me how college is always...
- My teachers telling me to follow my dreams
- They are always talking about college, being prepared for it, how to get in to college, and any help that you might need to get in
- I had one obstacle where I needed help and my teacher are there to help me

RQ9: What barriers have you encountered in accessing the pathways?

Code: Needing to help family

- I may apply for community college, so I can work part time
- I want to go into computer technology so I can get a part time job to help the family
- I want to continue with computers, but need to work too

RQ10: Do you feel supportive and encouraged to continue pursuing a career in the industry sector related to the pathway beyond high school?

Code: Pursuing careers pathways post high school

- Yes, something Multimedia related

- Yes, I feel supported to go to Community college and study more technology
- I want to study computer graphics
- I want to study industrial engineering, I'm going to CSUEB in that field
- I want to be a technician or programmer in the computer field
- Code: Teacher support
- All my teachers are telling me to pursue Multimedia at the college
- Teachers encourage me to go to college and learn more
- My teachers are supportive of me and my dreams

APPENDIX L

Analysis of Long Term ELL Students Research Questions

RQ1: At what age did you enter school in the US? Any prior educational experiences?

- Student A entered school at 16 yrs. old, completed the mid-year 11th grade in Mexico
- Student B entered school at 15 yrs. old, completed the 8th grade in El Salvador
- Student C entered school at 17 yrs. old, completed 11 grade in El Salvador
- Student D entered school at 6 yrs. old, been in US school his entire educational experience
- Student E entered school at 16 yrs. old, completed the 9th grade in Guatemala

RQ2: Are you aware of the Linked Learning academies at USA High School?

Code: Barriers to Pathways

- All students answered that they did were not aware of Linked Learning

RQ3: Are you enrolled in any certified Linked Learning Pathways?

Code: Access to pathways

- All five students were placed in the Engineering pathway, however have not taken any technical courses found in the Engineering pathway.

Code: Conflict with ELD courses

- All five students indicated that they had too many conflicts with the double blocking of ELD to access any program.

RQ4: Does it make a difference to you to have friends/peers enrolled in the pathway?

Code: Developing Networks

- Comfort with friends and making new friends
- Friends can explain what is being taught and help when needed
- One student like the routine of having conversation with friends

RQ5: If enrolled in the pathway, do you feel the pathway exposes you to college and career awareness?

Code: College and career readiness

- All five students indicated that they did not access to pathway and didn't know what college and career awareness was

RQ6: Do you know if you're meeting the CSU/UC college admissions requirements?

Code: Knowledge of A-G requirements

- All five students were not aware of the A-G requirements

RQ7: Do you feel belonging to a pathway is preparing you in being college can career ready?

Code: College and Career Readiness

- Since all five students are not taking any pathway classes, they are not receiving information about college and career readiness

RQ8: Do the teachers in the pathway discuss college and career readiness?

Code: Teacher Support

- Since not enrolled in pathway, teachers are not discussing college and career readiness

RQ9: What barriers have you encountered in accessing pathways?

Code: Language barriers

- Currently taking ELD 1 and can't pass CAHSEE

- Currently in ELD 4 and English classes, don't have room in the schedule for pathway classes and not being able to pass CAHSEE
- Currently fine arts to meet graduation requirements, not able to pass CAHSEE
- Not able to pass CAHSEE
- Currently taking ELD 4, expository writing and reading, not able to pass CAHSEE

RQ10: Do you feel supportive and encouraged to continue pursuing a career in the industry sector of the academy

Code: Aspirations

- All five students indicated that they do not receive information about the academies
- All five students felt that they wanted to better themselves in college
- One student wants to be a nurse
- One student wants to be a mechanic
- One student wants to explore options in community college
- One student wants to attend the community college in computer graphic

APPENDIX M

List of Acronyms

ACTE	Association for Career Technical Education
AA	Annual Assessment
AVID	Advancement via Individual Determination
AYP	Average Yearly Progress
BEA	Bilingual Education Act
CA CCSS	California Common Core State Standards
CAHSEE	California High School Exit Exam
CCSS	Common Core State Standards
CCM	Constant Comparative Model
CDE	California Department of Education
CEDLT	California English Development Language Test
CPA	California Partnership Academy
CST	California Standards Test
CTE	Career Technical Education
CSU	California State University
EC	Education Code
ELA	English Language Arts
ELD	English Language Development
ELL	English Language Learner
ELP	English Language Proficient
EPIC	Education Policy Improvement Center

ESEA	Elementary Secondary Education Act
ESL	English Second Language
FEP	Fluent English Proficient
HSL	Home Language Survey
HSTW	High Schools That Work
IA	Initial Assessment
IFEP	Initial Fluent English Proficient
LEA	Lead Educational Agency
LEP	Limited English Proficient
LL	Linked Learning
LL/CPA	Linked Learning/Career Partnership Academy
LT-ELL	Long Term English Language Learner
NCLB	No Child Left Behind
Perkins IV	Carl Perkins Vocational Act IV
PI	Program Improvement
PTHSD	Preparatory Technical High School District
RFEP	Reclassified Fluent English Proficient
RTI	Respond to Intervention
SDAIE	Specialized Designated Academic Instruction in English
SEI	Student English Instruction
SES	Supplemental Education Services
UC	University of California
USA High	USA High School
USDOE	United State Department of Education