

Copyright

By

Melinda Martin Valdez

2009

**The Treatise Committee for Melinda Martin Valdez certifies that this is the
approved version of the following treatise:**

**THE ROLE OF EARLY COLLEGE HIGH SCHOOL IN P-16 SUCCESS:
A CASE STUDY OF STUDENTS' PERCEPTIONS OF MISSION EARLY
COLLEGE HIGH SCHOOL EFFECTIVENESS**

Committee:

Edwin R. Sharpe, Co-Supervisor

Walter G. Bumphus, Co-Supervisor

Maria Franquiz

Armando Aguirre

Richard Rhodes

**THE ROLE OF EARLY COLLEGE HIGH SCHOOL IN P-16 SUCCESS:
A CASE STUDY OF STUDENTS' PERCEPTIONS OF MISSION EARLY
COLLEGE HIGH SCHOOL EFFECTIVENESS**

by

Melinda Martin Valdez, B.S.; M.S.

Treatise

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Education

The University of Texas at Austin

August 2009

DEDICATION

I dedicate this work to my son, Jason. It is because of you I aspire to demonstrate how anything is possible for someone with determination to pursue their dreams. You must defy blockades of negativity by sailing through them to seize and control your own happiness.

ACKNOWLEDGEMENTS

My parents have been my pillar of strength throughout my educational pursuits. They provided the determination to strive for excellence. I honor their unselfish support of my dreams, including the dream to become the first in our family to earn a doctoral degree. Thank you for unconditional love – without it, I would not be where I am today.

To my husband and son, thank you for the sacrifices you had to endure to enable this achievement. In your own unique way, each of you motivated me to complete this study as a symbol of the end of my formal education before embarking upon future opportunities.

Words cannot accurately describe my gratitude for the encouragement and support I received from the incredibly talented individuals in the Department of Educational Administration at The University of Texas at Austin. Ruth, Beverly, and Sarah, your unwavering efforts to assist Blockers are a most admirable event to observe and experience – you make the program function at its optimum level! Dr. John Roueche, my deepest appreciation for inviting me into the CCLP family and for giving me the opportunity to work with my incredibly talented colleagues in Block 63. Dr. Walter Bumphus, you are the epitome of what it means to be a leader of leaders. Your effortless attention to detail is only one of many skills you possess that inform your students of the myriad of personal characteristics that define a true leader. Dr. Bill Lasher, thank you for your guidance as my advisor and professor. Dr. Norvell Northcutt, I am thankful for your patience as you lead me toward my endeavor into the world of

dissertation methodology. To my lead supervisor in completing this study, Dr. Edwin Sharpe, your willingness to ensure I was addressing every aspect of the P-16 concept for this study exemplifies your admirable dedication to your students. More importantly, your extensive knowledge is invaluable for the efforts underway to expound the importance of P-16 initiatives to our nation's economic future. I am in awe of your tireless work to inform your students; the local, state, and national community; and your colleagues concerning the diligence needed to make a positive difference for the success for all in our education system. Thank you for allowing me to learn from you.

My committee was an outstanding team of leaders who gave me their time and energy to support this study. In addition to Dr. Sharpe and Dr. Bumphus, thank you Dr. Maria Franquiz for your methodology expertise. Dr. Armando Aguirre, you welcomed me into your school and patiently supported my research efforts. Dr. Richard Rhodes, you welcomed me onto your campus and allowed me to study yet one more of your ingenious collaborations. I am very grateful to have had the opportunity for such outstanding representatives of educational leadership on my committee. Thank you for assisting me to build upon my confidence of knowledge in an area that continues to fascinate me.

Finally, I wish to acknowledge "Channel 63." Brenda, thank you for taking the time to discuss the unique challenges we faced as mothers of toddlers while navigating through our challenging programs of study. Christy, you offered your experience with dual credit/concurrent enrollment without hesitation and I am very thankful for your

generosity. Andrew, I appreciate the valuable discussions about early college high schools. Danette, Nancy, and Paul, although you had to return to your respective institutions earlier than I would have desired, I was happy to have your support when we made contact – thank you. Finally, to those who were interning while I finalized this study: Elise, Jason, Kerry, Karla, and Linda. Each of you were deeply invested in your internships, yet still made time for words of encouragement during this arduous process. Block 63, I am honored to be in your company. Good show!

**THE ROLE OF EARLY COLLEGE HIGH SCHOOL IN P-16 SUCCESS:
A CASE STUDY OF STUDENTS' PERCEPTIONS OF MISSION
EARLY COLLEGE HIGH SCHOOL EFFECTIVENESS**

Publication No. _____

Melinda Martin Valdez, Ed.D.

The University of Texas at Austin, 2009

Co-Supervisors: Edwin R. Sharpe and Walter G. Bumphus

The short existence of Early College High Schools has not allowed for considerable research to assess their operational effectiveness. Furthermore, the effectiveness perceptions and reactions of students enrolled at these schools have not been given ample opportunity to be studied – an integral component of any school's operation. The purpose of the study is to focus on one specific ECHS while in its third year of existence to assess its operational effectiveness from the perspective of its students.

The research methodology which was selected as appropriate for the study involves the use of qualitative research coupled with the case study method. In order to assess for reliable observations, currently enrolled students were interviewed to gain

knowledge of their perception of the operational effectiveness at their early college high school. Additional qualitative data was utilized with an inductive analytic approach to provide for a detailed view of the school. Data was segmented into relevant parts to help identify emergent themes. The following themes emerged from the findings: attainable success; student roles and responsibilities; personalization; support to achieve higher-level work; highly qualified teachers; and engaging parents and community. The findings suggest that student perceptions reflect an effective school environment that enables them to meet the expectations of high school graduation and completion of up to two years of college credit. Moreover, the supplemental data collected provided evidence of effective school administration and instructional practices that foster the support and engagement of students to meet their needs as early college high school students.

An objective study of an early college high school may assist its administrators to ascertain whether they are meeting the needs of their students. Future research concerning this topic may be able to utilize the results and conclusions of this study to further enrich the knowledge of effective early college high schools.

TABLE OF CONTENTS

List of Tables.....	xiv
Chapter One: Introduction.....	1
The P-16 Concept of Education	1
Documenting the Needs of Underrepresented Students.....	3
High School-Community College Initiatives for Underrepresented Students ..	4
Development of Early College High Schools	5
Mission Early College High School.....	6
Statement of the Problem	7
Purpose of the Study	7
Research Questions	8
Organization of the Study	8
Definition of Terms.....	9
Chapter Two: Review of Literature	11
The P-16 Concept of Education	11
Documenting the Needs of Disadvantaged and Underrepresented Students ..	12
High School-Community College Initiatives Primarily Benefiting Traditional Students	17
High School Initiatives Targeted to Promote College Access for Underrepresented Students.....	19
Tech Prep	20
AVID.....	21
GEAR UP.....	22
Project GRAD	23
High School-Community College Initiatives Targeting Underrepresented Students.....	23
Programs from 1950-1970	24
1970-Present: Middle College and Early College High School.....	25
A Focus on Early College High Schools.....	27

The Design of Early College High Schools	28
Benchmarks of Effectiveness	34
The Development and Evolution of Early College High Schools	36
National Focus	36
The State of Texas	37
El Paso, Texas	40
Chapter Three: Methodology	43
Introduction	43
Qualitative Research and Case Study Methodology	43
Overview of the Research Design	45
Benchmarks of Effectiveness: The Foundation for the Research Questions ..	46
Development of Research Questions	46
Development of Interview Questions	47
Student Interview Questions	47
Teacher Focus Group Questions	49
Selection of Research Location and Participants	50
Methods of Data Collection	51
Interviews	51
Classroom Observations	52
Data Analysis Protocol	53
Validity	55
Triangulation	56
Reliability	57
Generalizability	57
Ethical Concerns	58
Chapter Four: Findings	60
Introduction	60
Mission Early College High School Profile	60

Key Aspects of Early College High Schools	60
Mission Early College High School Overview	62
A Closer Look at Mission Early College High School	63
Student Enrollment.....	63
Student Demographics	64
Focus on Teachers.....	64
Dual Credit Courses	65
Curriculum	65
State Rating	66
Extracurricular Activities	67
2008-2009 Mission Early College High School Juniors.....	68
Classroom Observation Findings	69
Teacher Focus Group Perceptions	72
School Leadership.....	72
School Design: Location and Size	73
Student/Family Support	74
Student Participant Perceptions.....	75
Research Question One Themes	75
Success is Attainable.....	75
Student Roles and Responsibilities	76
Research Question Two Themes.....	77
Personalization.....	77
Support to Achieve Higher-Level Work	78
Research Question Three Themes.....	79
Highly Qualified Teachers	79
Technology.....	80
Research Question Four Theme	82
Engaging Parents and Community.....	82

Conclusion.....	83
Chapter Five: Analysis and Interpretation of the Research Results.....	84
Introduction.....	84
Secondary Data Sources.....	85
Classroom Observations.....	85
Teacher Participant Themes.....	86
Primary Data Source: Student Participants.....	88
Research Question One.....	88
Research Question Two.....	89
Research Question Three.....	90
Research Question Four.....	92
Implications for Future Research.....	93
Conclusion.....	94
Appendix A: Student Participant Interview Questions.....	98
Appendix B: Teacher Participant Interview Questions.....	100
Appendix C: IRB Approval Letter.....	101
Appendix D: Parent Consent Form with Child Assent.....	104
Appendix E: Adult Consent Form.....	107
References.....	110
Vita.....	119

LIST OF TABLES

Table 1: Beginning (B) and Completed (C) MECHS Students By Academic Year..	64
Table 2: MECHS Recommended Dual Credit Program	65
Table 3: 2008-2009 MECHS Subjects and Classes	66
Table 4: Classroom Observation Summary	72

CHAPTER ONE: INTRODUCTION

Policymakers in the United States are continually looking for ways to increase student achievement especially for children from lower socioeconomic status (SES) families. In this effort educators, policy makers, and others including states and local communities are investigating concepts and methods to create an enhanced approach to education in which all levels of education – pre-school through college – coordinate, communicate and educate as one integrated system. In this regard, there has been a growing awareness that the educational process begins at birth and extends from pre-kindergarten through high school and on to postsecondary education and careers. Collectively, these initiatives and efforts have become known as the P-16 concept of education which involves the intellectual and social development of children and young adults along a continuum from birth to college and careers. In this phrase “P” means preschool and “16” refers to receiving a bachelor’s degree after 12 years of primary and secondary school, plus four years of college.

The P-16 Concept of Education

P-16 is a powerful framework for citizens and policymakers to use to improve teaching and learning and thus better prepare students for living, learning, and working in a changing world. The ideas surrounding P-16 efforts lie in the desire to align school districts with higher education. The primary goal is an integrated system of education which encourages student achievement, results in more students progressing to

postsecondary education, and produces better outcomes for students, educators, and communities (Rochford, O'Neill, Gelb and Ross, 2005).

Mortensen (2005) contends that there is a disconnect between what high school teachers and students think is needed for a high school diploma and what college professors and employers say is actually required for success in college and the workplace. Two remedies to ease the transition from high school to college are first, to make the high school curriculum academically rigorous and second, to improve communication and outreach between postsecondary institutions and high schools. In conjunction with the desire to link these educational entities, there is an economic imperative in exploring the P-16 program, as noted by the National Commission on the High School Senior Year:

As the knowledge and skill demands of the new economy have increased, there is increasing consensus among economists (and among families) that virtually all young people need the knowledge and skills necessary to benefit from postsecondary education – both on the job and in formal postsecondary institutions. In short, whether a student progresses from postsecondary education to a job, or to a first job which ultimately leads to enrollment in postsecondary education, *all* students need high-level academic knowledge and skills associated with college preparatory studies (2001, as cited in Somerville and Yi, 2002, p. 28).

The central goal of P-16 is to create a system of education which begins in very early childhood and continues through college all the while promoting access, standards, accountability and life-long learning. Common goals of P-16 include:

- Expanding access to early learning for children ages 3 to 5, and improving their readiness for kindergarten
- Smoothing student transitions from one level of learning to the next
- Closing the achievement gap between White and minority students
- Upgrading teacher education and professional development
- Strengthening relationships between families and schools
- Creating a wider range of learning experiences and opportunities for students in the final two years of high school
- Improving college readiness and college success.

The idea to focus on the interrelated nature of the education pipeline has been explored in the past, as illustrated by Hodgkinson (1985): “If people begin to see the educational system as a single entity through which people move, they may begin to behave as if all of education were related. The time has come to implement change with the emergence of P-16” (p. 23).

Documenting the Needs of Underrepresented Students

There is heightened awareness of the special needs of young people historically underrepresented in higher education. The socioeconomic status (SES) of students’ families is a key factor when assessing the extent of early learning. Burkham and Lee (2002) discuss the fact that average cognitive scores of preschool children from upper level SES groups is 60% higher than those children from lower SES groups. It is also an acknowledged fact that the fastest-growing portion of our population is young people who are low-income and either African-American or Hispanic. Research indicated that

only 65% of those from lower SES status earn a high school diploma, compared with 91 percent of students from the middle and upper levels (Hoffman, Vargas, Venezia and Miller, 2007). As expected, the lack of adequate academic preparation leads to high college failure rates. While one out of two students from middle- and upper-class families can be expected to earn a college degree, only one in ten students from the lowest SES group will do so (Steinberg and Almeida, 2008). Over the last decade, research has demonstrated that low income and minority students can achieve at exceptionally high rates when they are provided with the expectations, resources, and opportunities that are commonplace in our nation's best schools.

High School-Community College Initiatives for Underrepresented Students

The limited impact of traditional educational programs to serve the needs and success of underrepresented high school students has prompted educators to develop programs which are attuned to the life situation of this student population. The objective of some of these programs is focused on offering high school students college access opportunities, especially with the active involvement of community colleges.

Community colleges have historically served as institutions accessible by anyone who wished to enter through their doors. Gleazer (2000) explains the driving forces of the mission of community colleges: adaptability, sustaining relationships with students, and community-focus (p.13). The ability of a community college to adapt to the changing needs of its community and maintain sustainable relationships with students is

at the core of collaboration between community colleges and public school districts/high schools.

In addition to saving time and money, motivation is increased by enabling an underrepresented student to move through high school to postsecondary education more quickly than traditional methods allow. Simultaneously, collaboration improves the college utilization rate and reduces the overall cost of an individual student's educational passage.

Development of Early College High Schools

The continued failure of the nation's school system to meet the needs of underrepresented students prompted the Bill & Melinda Gates Foundation to become involved in high school reform. In doing so, they expanded the Middle College High School (MCHS) concept first articulated in 1972 (Lieberman, 2004). MCHS created learning environments on college campuses to provide disengaged high school students a fresh start in high school and an opportunity to participate in college level classes.

Although the two innovations have some differences, the design of Early College High Schools (ECHS) is based strongly and directly on the 30-year experience of MCHS, and that experience points to the requisites for success in the new initiative of ECHS. The design of these newer schools incorporates some of the features of MCHS design but emphasizes different goals. The most significant difference between the two programs is that ECHS have a defined and structured program that enables high school students to earn both their high school diploma and their Associates degree in 4 to 5

years with no cost to the student. In contrast, the MCHS encourages students to gain college credit, but does not establish an expectation for completion of a degree.

The ECHS curriculum is a coherent unit with high school and college-level work blended into a single academic program. The partnerships developed between public secondary schools and higher education institutions to create an ECHS reflect local conditions based on the specific population served. The goal of the ECHS program is to “minimize the barriers between high school and college, to ease the transition from secondary to postsecondary school, to prepare the students for and attract them to higher education, and to increase the high school graduation rates” (Glick, 2006, p. 2). This program offers promising methods to help achieve some of the goals of the P-16 concept of education.

The ECHS operates under the principle that improved high school curriculum and instruction tied to the incentive of earning college credits will motivate struggling students, thereby increasing their interest in and access to postsecondary education as well as their chances of completing college.

Mission Early College High School

Mission Early College High School (MECHS) is a collaboration between the Communities Foundation of Texas (CFT), El Paso Community College (EPCC), and Socorro Independent School District (SISD). MECHS is located on the Mission del Paso campus of EPCC in El Paso, Texas. EPCC is one of the fastest growing community colleges in Texas and awards more associate degrees to Hispanic students than any

college in the country (Rhodes, 2008). MECHS is one of four operational ECHS in partnership with EPCC. SISD is one of the fastest growing school districts in the state of Texas, located in the southeastern portion of El Paso, Texas (MECHS Principal, 2008).

Statement of the Problem

The concept for early college high schools is relatively new, and a majority of the schools currently operating were established in the last few years. Because these innovative educational institutions are such a novel phenomenon, there has been a lack of opportunity to begin the process of evaluating the success and effectiveness of the schools.

In light of this reality, the problem or need arises to assess current ECHS operations. How are ECHS functioning as they strive to educate the underrepresented students in their classrooms? Furthermore, as the assessment process is initiated it is particularly important and germane to study the perceptions and reactions of students currently enrolled in these new and still developing educational institutions known as early college high schools.

Purpose of the Study

The purpose of the study is to focus on one specific ECHS which is in its third year of existence in order to assess its operational effectiveness from the perspective of the currently enrolled students. The study is designed to gain insight into the operation of the school and to assist its administrators to ascertain whether they are meeting the needs of their students. Based on the results of this study, the school district and the

partnering community college may decide to modify some aspects of their operation in an effort to improve the quality of the education provided to the students.

Research Questions

1. What are students' perceptions of how Mission Early College High School is preparing them for both high school graduation and completion of up to two years of college credit?
2. What are students' perceptions of how Mission Early College High School is providing comprehensive student supports based on their academic and social needs?
3. What are students' perceptions of how Mission Early College High School is demonstrating effective instructional practices?
4. What are students' perceptions of how Mission Early College High School is engaging students, parents, community, business, and public agencies in developing and sustaining the school?

Organization of the Study

In Chapter Two, the literature review documents high school initiatives and programs which promote college access for traditional and non-traditional students. Additionally, information is provided about ECHS programs from the national and Texas perspective, as well as the local area in El Paso, Texas.

Chapter Three presents the research methodology designed to gather data regarding the operation of Mission Early College High School which is a collaboration between El Paso Community College (EPCC) and Socorro Independent School District (SISD). The research design for the study included classroom observations and

interviews with MECHS juniors and their teachers. The results of the research data gathered from primary and secondary sources at MECHS are detailed in Chapter Four. The final chapter of the study is focused on an analysis and interpretation of the research results.

Definition of Terms

Dual Credit: Programs that allow high school students to enroll in courses and simultaneously earn college and high school credits.

Early College High School (ECHS): Public secondary schools designed to offer underrepresented youth an accelerated course of study enabling them to simultaneously earn a high school diploma and an Associate's degree or up to 60 hours of college credit at no cost to students.

Early College High School Initiative (ECHSI): A group of organizations which initiated a program with the mission of increasing the rates of high school graduation and postsecondary success for underrepresented youth (ECHSI, 2008).

Formative Assessment: A type of assessment used to understand a program's effectiveness and to identify whether changes are necessary in order to meet program goals (Maki, 2004).

Middle College High School (MCHS): Public secondary schools committed to meeting the academic, vocational and affective needs of underserved youth. MCHS are designed to bridge secondary and post-secondary education and use innovative curricula and pedagogy provided in a small nurturing environment. Since early 2000 many existing

middle college high schools have been converted or redesigned into early college high schools.

P-16: Involves the intellectual and social development of children and young adults along a continuum from birth to college and careers. In this phrase “P” means preschool and “16” refers to receiving a bachelor’s degree after 12 years of primary and secondary school, plus four years of college.

Underrepresented Students: Students who include low-income young people; first-generation college goers; English language learners; and students of color, for whom society often has low aspirations for academic achievement.

CHAPTER 2: REVIEW OF THE LITERATURE

The P-16 Concept of Education

P-16 is a term used to describe the goal of creating a seamless educational system of public education. It refers to the spectrum of pre-school through college postsecondary opportunities for more students than traditionally have been included. Many of the students who are not being well served by the current educational establishment are lower-income, mostly minorities who have been historically underrepresented in postsecondary education.

The classic description of a P-16 system of education, as described by Gordon Van de Water and Theresa Rainwater of the Education Commission of the States (2001), speaks to every educator's heart:

Imagine a system of education where every child enters school ready to learn, where all third graders read at or above grade level, where all students have taken algebra by the end of the 8th grade, where high school exit exams test students at the 12th-grade level and are aligned with college admissions requirements, where all young people graduate from high school prepared for college or work, and where every student who enters college finishes college (p. 4).

Current researchers often ponder if this statement is realistic. The authors themselves state: “...*is such a system possible? Not in its purest form, perhaps, but approaching such an ideal is certainly worth pursuing...*” (Van de Water and Rainwater, 2001). Driving this pursuit is a host of new challenges and pressures: demographic shifts, changes in the economy and in the workplace, and continuing advances in technology and telecommunications.

Historically, the three levels of the American education system – early learning, K-12 and postsecondary – have developed and operated independently of each other. This reality has led to a fractured and dislocated educational experience for many students. These three levels, however, have mutual areas of concern, and administrators at each level have the responsibility to increase student achievement across racial groups and income levels. This concern has prompted calls to transform the educational system based on the P-16 concept. Such change requires governors, education officials at both the K–12 and college levels, business executives, and others to work together to improve the alignment of high school curricula with the expectations of postsecondary education and work.

Documenting the Needs of Disadvantaged and Underrepresented Students

In the current information- and technology-based economy, a high school education is no longer sufficient as a terminal degree. Surveys show that many high school graduates do not meet employers' expectations in a variety of academic areas, as well as in attendance, teamwork/collaboration, and work habits (National Association of Manufacturers, 2005; Peter D. Hart Research Associates, 2005). Whatever specific paths young people pursue, it is increasingly clear that the skills needed for work often mirror those required for admission to and success in postsecondary education (Carnevale & Desrochers, 2003).

Many of the fastest growing jobs that pay reasonably well require at least some postsecondary education (Carnevale & Desrochers, 2003). However, due to what is

often characterized as a leaky educational pipeline, there are too many students who do not complete high school and are unable to make a successful transition to postsecondary education and careers.

Research highlights the depth of the barriers to higher education, especially for underrepresented students. The high school graduation rate has changed little over the past 20 years and hovers at 70% (Barton, 2005). College readiness rates vary widely by student subgroups. The rates for White and Asian students are 37% and 38%, respectively, while the rates are 20% for black and 16% for Hispanic students (Greene, 2003). High school graduates face continuing problems with postsecondary education entrance and persistence. There are 66% of high school graduates who enroll in some kind of postsecondary education institution immediately following high school, but only about 25% earn a degree (Education Trust, 2001). As with high school graduation rates, students from various backgrounds and racial/ethnic groups enter postsecondary education and experience success at widely differing rates. Furthermore, students from families in the top income quartile are about seven times as likely as students from families in the bottom income quartile to earn a bachelor's degree (Education Trust, 2001). Clearly, the need to address these alarming facts cannot be ignored.

An examination of the three levels of the nation's education system produces findings that further illuminate the need for alignment. Early learning is the first component of the P-16 continuum and includes preschool and pre-kindergarten. Family SES plays a major role in early learning. According to Burkham and Lee (2002), the

average cognitive score of high-income children as they reach kindergarten is 60% higher than children from low-income groups. The lack of quality educational opportunities at an early age results in a pattern of inequality as measured by state-mandated assessments. Children who participate in high-quality early childhood and preschool programs outperform students who do not attend these programs in the following ways: (1) higher rates of high school graduation; (2) higher rates of enrollment in postsecondary institutions; (3) lower rates of grade retention; (4) fewer special education placements; (5) fewer numbers of dropouts, arrests, teenage pregnancies and welfare recipients; and (6) higher employment rates as teens and young adults (Fulton, 1996).

K-12 preparation for college and the workforce has been a growing problem. While U.S. students in 4th and 8th grades score above the international average in mathematics, 15-year-olds score below the international average (American Institutes for Research, 2005). When these students apply for college, 40% of four-year university students and 63% of community college students require remediation (Callan, Finney, Kirst, Usdan & Venezia, 2005). This lack of preparation for college also prevents far too many students from participating in postsecondary education. Nationally, only 38% of 9th graders persist through high school and directly enter college (Mortensen, 2005).

The college completion rates in this country present far worse implications than the transition issues between high school and postsecondary education. Nationally, only 18% of 9th graders go on to complete a college degree “on time” (The National Center

for Public Policy and Higher Education, 2004). The ability of the United States to compete in the current global economy is impaired by educational attainment rates this low.

Few states have designed their high school assessments to answer whether students are prepared for success in college and work. In 2005, ACT Inc. found that up to 70 percent of college admissions test-takers were not ready for college work in reading, writing, and mathematics (Spence, 2007). This means that meeting the college readiness challenge extends far beyond simply having students take the “right” high school courses, because most college-bound students already do.

There is widespread agreement that many students in our schools and colleges need to learn more to lead successful economic and civic lives as adults in the 21st century. Implicit in this consensus is the notion that the current educational system is not capable of accomplishing this aspiration. Haycock and Huang (2001) express further the need for changes in our educational system:

Fewer than three in ten teenagers think their school is "very academically rigorous; "A" students in high-poverty schools score at the same level as "C" and "D" students in affluent schools; Seventy-two percent of high school graduates go on to some form of postsecondary education, yet only 44 percent have taken a college-prep curriculum; Twenty-nine percent of college freshmen take one or more remedial courses in reading, writing, or math; By age 24, 7 percent of young people from low-income families have graduated from college, versus 48 percent from high-income families. (p.14).

To secure their future within the new workplace, young people now need the skills and knowledge associated with at least two years of college. The minimum endpoint of education is moving from grade 12 to grade 14.

Projections for the future student population are a major consideration when discussing our system of education. The Hispanic population is projected to grow substantially over the next 25 years. By 2030, its share of the U.S. population will increase from 14 percent to 20 percent; this growth is being fueled both by higher birth rates and by elevated immigration rates (Kirsch, Braun, Yamamoto, & Sum, 2007). According to the findings of the American Community Surveys (2004), nearly 57 percent of the 16- to 64-year-old Hispanic population in the United States was foreign-born in 2003, up from 46 percent in 1990, and slightly more than half lacked a high school diploma. Heightened awareness of the Hispanic demographic group is imperative to the successful planning of this nation's education system.

The need for change is further illustrated by the National Center for Public Policy and Higher Education, which reported that White adults ages 25 to 64 were twice as likely as African-American adults to have a bachelor's degree and almost three times as likely as Hispanic adults (2000, as cited in Kirsch, et al., 2007, p. 23). These differences in educational attainment, coupled with substantial increases in the proportions of African-American and Hispanic adults comprising the working-age population, indicate the likelihood of a less-educated workforce over the next 20 years (Kirsch, et al., 2007, p.23)

High School-Community College Initiatives Primarily Benefiting Traditional Students

There are current programs linking secondary schools with two- and four-year institutions of higher education. These college access programs allow students to participate in college-level courses for credit while they are still in high school. Although the concept of secondary-postsecondary linkages has been extensively documented in the past decades, these programs have traditionally been available to high-achieving, traditional students and have not served disadvantaged and underrepresented students.

A common example of a college access program allowing students to earn high school and college credit at the same time is dual credit. Dual credit offers high school students the opportunity to enroll in postsecondary education courses prior to receiving a high school credential. All but 10 states have legislation authorizing some form of dual credit, but, even without statewide policy, dual enrollment programs exist in all 50 states (Miller, 2008).

These courses count as credits toward a high school diploma and potentially earn the student college credit. Courses are taught by either high school or postsecondary faculty in high school or on a college campus. In rural areas with limited access to postsecondary education institutions, dual enrollment is often available through distance learning, satellite campuses, or online courses (Vargas, 2008). A large number of dual credit courses are also taken in career and technical fields (Miller, 2008). Typically,

students must qualify academically to participate in college-level courses. Admissions requirements are based on high school GPA, attendance, and/or by passing a college placement test.

Dual credit and concurrent enrollment are often considered together, but there is an important distinction between the two (Vargas, 2008). Dual credit describes courses from which students receive both high school and college credit simultaneously. Concurrent enrollment represents college courses for which students only receive college credit. Statewide dual credit programs include those mandated by state legislation instructing public postsecondary institutions to offer opportunities for qualified high school students to enroll in courses through the postsecondary institution. In some states, these mandated dual credit programs are funded entirely or partially by the state and students earn credit both at their home high school and at the postsecondary institution offering the course (Vargas, 2008).

There is an additional common example of a method used to link high schools and colleges for high school students: Advanced Placement (AP) classes. AP classes allow high school students to take college-level classes in high school settings. These culminate in an examination which is aligned with college-level content and expectations. Depending both on the examination score received and on the college attended, these courses may lead to the award of college credit for a student when he or she is admitted to a college or university. AP courses are taught by AP-trained high school teachers who follow course guidelines.

Since its inception in 1955, the AP Program, which is administered by The College Board, has grown significantly. The AP program offers 37 courses and exams; in 2008, 2.7 million exams were taken by 1.6 million students at over 17,000 high schools (The College Board, 2008). AP continues to grow as schools and school districts institute policies that allow more students access by subsidizing the cost of the exams and opening AP classes to many students.

High School Initiatives Targeted to Promote College Access for Underrepresented Students

College access programs targeting underrepresented high school students are used as a mechanism to challenge students and provide pathways to postsecondary education and careers (Chao, 2008). These programs involve alternative education models that incorporate dual credit and concurrent enrollment, based on the belief that high school students, former dropouts, low performers, or students lacking adequate high school credits can earn a high school diploma and complete challenging college level work if provided adequate and appropriate support. Most of these programs are designed and operated by community colleges or community-based organizations in partnership with an institution of postsecondary education (Betheil, 2008).

Students require the motivation to participate in these programs. The coursework is challenging and students need the support of caring adults to guide them through these programs. Peer support is another important component to these programs. When students feel they are unable or unwilling to meet the demands of these programs, peers

can sometimes positively influence the students when adults cannot achieve the same success.

Colleges and universities work with high schools to create college access programs through outreach initiatives as a way to enroll a more diverse student body and improve parity among SES groups in college-going rates. Most college access programs provide activities for students such as financial counseling, scholarships, college visits, career guidance, personal growth/enrichment, tutoring, academic counseling, and test preparation courses (National Access College Program, 2008).

There are a variety of high school-based programs designed to encourage underrepresented students to prepare and go to college. Four of the most widely known and successful are: Tech Prep, AVID, GEAR UP, and Project GRAD. The four programs are primarily housed in the public K-12 system with a focus on the middle grades and high school years. They focus on first-generation, low-income, and minority students with the goal of increasing attendance and success in college.

Tech Prep

A common example of a method used to link high school and college for high school students is the Tech Prep program. Tech Prep is a sequence of study in a technical field that is planned as early as the 9th grade but typically begin in the 11th grade (Miller, 2008). After completion of secondary instruction, (during which students have opportunities to take dual credit courses) the sequence extends through two years of postsecondary occupational education or an apprenticeship program and culminates in

an associate's degree or certificate. The program prepares students for a highly skilled technical occupation that enables them to enter either the workplace directly as a qualified technician or to continue their education. Tech Prep is funded under the federal Carl D. Perkins Vocational and Technology Education Act through grants to states (Hudson, 2008).

The U.S. Department of Education estimates that 7,400 high schools (47%) offer one or more Tech Prep courses of study. Most community and technical colleges are part of a Tech Prep consortium and many four-year universities also participate (Hudson, 2008). Tech Prep is a vehicle for integrating academic and vocational curriculum through a “hands-on” program. It helps students develop skills for the workplace, provides them a career direction and focus, and establishes a connection between what is taught and the real world.

AVID

Advancement Via Individual Determination (AVID) is a 5th- through 12th-grade program to prepare students for four-year college eligibility, and it targets students in the academic middle—B, C, and even D students—who have the desire to go to college and the willingness to work hard (Watt, Powell & Mendiola, 2004). Most AVID students come from low-income and/or minority families and will be the first in their families to attend college. An AVID elective class is taken in conjunction with their school's honors and AP class offerings. The AVID elective class meets for one period each day, during which students learn organizational and study skills, develop critical thinking skills,

receive academic assistance from peers and college tutors, and participate in enrichment and motivational activities that make college seem attainable (Watt, Powell & Mendiola, 2004). While the national average for four-year college enrollment remains at about 35% of high school graduates, a longitudinal study conducted by Guthrie (2002), indicates that approximately 95% of AVID students report enrolling in college; 77% in four-year institutions and 17% in community colleges. Urban schools, rural schools, resource-rich schools, and struggling schools have found that AVID meets the needs of their students who are in the middle ranks of their class (Cunningham, Redmond & Merisotis, 2003).

GEAR UP

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a discretionary grant program of the U.S. Department of Education designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education (U.S. Department of Education, 2008). The U.S. Department of Education provides states with six-year grants to create partnerships that provide services to high-poverty middle and high schools. Among the college access programs listed in this study, GEAR UP mirrors an Early College High School more so than the other programs, as it employs partnerships between school districts, institutions of higher education, and at least one community organization partner. GEAR UP partnerships supplement, not supplant, existing reform efforts; offer services that promote academic preparation and the understanding of costs to attend college; provide

professional development; and continuously build capacity so that efforts can be sustained beyond the term of the grant (U.S. Department of Education, 2008).

Project GRAD

Project Graduation Really Achieves Dreams (Project GRAD) is a comprehensive program that strives to improve the academic achievement of students from low- income backgrounds. Project GRAD was founded on the belief that there is a relationship between a student's family life, discipline problems, mathematics achievement, reading achievement, and college goals (Project Grad USA, 2008).

High School-Community College Initiatives Targeting Underrepresented Students

Students drop out of high school for many reasons, but a major factor is that they find school boring and do not see the connection between their schoolwork and their future (Bridgeland, DiIulio, and Morison, 2006). High schools often lack the fundamental characteristics that make them attractive to youth: a foundation built on youth development principles, engaging learning, connection to the adult world, and strong underlying supports to meet individual students' needs. If the current design of most U.S. high schools is effective for only a limited number of youth, it is logical for communities to offer other options and choices to help more students succeed.

The limited impact of programs such as dual credit and concurrent enrollment for underrepresented students has prompted educators to reexamine these programs' initial objectives and create a modern approach to target these students. The initial objectives of these programs are designed to offer high school students college access

opportunities. Presented below is a review of the earliest efforts leading to current high school-community college reforms aimed at disadvantaged and underrepresented high school students.

Programs from the 1950-1970

The first of these innovative reform approaches has its antecedents in the 1950s when education activists, specifically the Ford Foundation for the Advancement of Education (FAE), funded scholarships for intellectually capable high school students, who were performing poorly, to leave high school altogether and enter college early. Manno and Berry (2001) provide information about an influential 1950 Ford planning document which made it clear that Ford had strong ideas about the role of education in American life:

Even in this country persons of all races and colors do not have equal access to education. The advantages of education are also walled off behind economic barriers...The poorer families, and those composed of members of our minority groups, are the ones most urgently requiring educational opportunity to improve their economic and cultural status. Yet they are the very ones against whom these educational barriers loom highest, and in consequence their cultural and economic inequalities tend automatically to be inherited.

Although moderately successful, the experiment was short-lived when the foundation could not entice a benefactor to continue underwriting the scholarships (Wechsler, 2001). In the mid-1960s, the first forerunner of the middle and early college concept was established at Simon's Rock College in Great Barrington, Massachusetts. While the notion of early college has gained considerable momentum in recent years, Simon's Rock College remains unique: the only college in the country specifically

founded and solely dedicated to offering a residential liberal arts college program to students after the tenth or eleventh grade.

This arrangement made it possible for high school students to graduate with a junior/community college degree as well as the traditional high school diploma.

1970-Present: Middle College and Early College High School

The early college concept began as an idea from the creators of Middle College High Schools (MCHS). MCHS are secondary schools, usually Grades 10–12, located on college campuses for underrepresented students who have the potential to benefit from a rigorous academic curriculum offered within a supportive and nurturing environment. An MCHS uses the facilities and resources available at the postsecondary education institution that is hosting them.

The first MCHS was founded in 1974 by Janet Lieberman at LaGuardia Community College (Middle College National Consortium, 2008). This program created learning environments on college campuses to provide disengaged high school students a fresh start in high school and an opportunity to participate in college level classes. The program designers focused upon the hope that students would matriculate upon high school graduation. The Middle College National Consortium (a support network for MCHS) assists schools, both new and established, to receive support as they implement educational reforms designed to help under-performing students meet high academic standards.

An important evolution in the high school-community college initiatives targeting underrepresented students is Early College High School (ECHS). The “early college” concept emerged in 2000. Since 2002, the partner organizations of the Early College High School Initiative (ECHSI) have started or redesigned almost 160 schools. The schools provide low-income youth, racial minorities, first-generation students, English language learners, and others underrepresented in higher education with the opportunity to simultaneously earn a high school diploma and an associate’s degree. According to Marcy (2006), ECHS offer active and rigorous learning communities. These schools include not only introductory college courses in specific disciplines, but a demanding core curriculum that conveys a message of high expectations for academic standards. ECHS offer college courses at postsecondary institutions to improve the likelihood of college entrance by traditionally underrepresented students. Efforts are also made to endow students with effective studying, learning and thinking habits, and to make the financial burden less of a factor for those who wish to attend college. The requirement of ECHS to allow students the opportunity to study and learn on college campus answers the need to promote a college-going culture. Increasing the amount of time that new college students spend on campus enhances their probability of success (Gardner, 1996).

Communities who choose the ECHS model are focused on their underserved student population. A contributing factor to this model’s benefits is its location on a community college campus. This critical element provides easy access to postsecondary

classes, and most importantly creates a college-focused environment for high school students.

A Focus on Early College High Schools

Educational leaders are in general agreement with politicians, activists, and scholars in their willingness to move beyond current educational practices to create successful learning environments for those students they cannot seem to reach. They share in the belief that critical ailments of the large, modern high school can be mitigated by a smaller institution designed to address the affective needs of students in conjunction with more rigorous and relevant curriculum and pedagogical approaches. Attention is currently being focused on the transformation of MCHS to ECHS and new ECHS schools with evidence to support credible results of the limited number of innovative high school projects (Steinberg & Allen, 2000).

ECHS are designed to provide an alternative path to higher education for some of our nation's most vulnerable students. They are small high schools from which students graduate in either four or five years with a high school diploma and an associate of arts degree or enough college credits to enter a four-year program as a college junior. Like MCHS, they are typically located on the campus of a postsecondary education institution, yet they differ, as their focus is on ensuring all students receive both a high school diploma and an associate's degree or equivalent transferable credits at graduation.

The Design of Early College High Schools

The innovative small public ECHS offer the alignment and blending of the secondary and postsecondary experiences for students historically underrepresented in higher education. ECHS defy commonly held expectations for this student population and set them on a path toward academic and career success. Fundamentally, the ECHS model, as described by the ECHSI (2008):

- Reaches out for students who are undeserved by the regular schools;
- Demands a cooperative relationship between the district high school administration and the college president;
- Offers a different sequence of courses from the tenth grade and an accelerated program from the ninth grade to the Associate's degree, which can be achieved in five years or less, instead of six;
- Combines the resources of a high school on the college campus with the college facilities (gym, library, cafeteria), making them all available to the early college high school student;
- Requires active college campus collaboration from the college administrative structure: faculty interchange, support from the college divisions of finance, admissions, scheduling, and counseling under a college-appointed administrator;
- Enhances the role of high school faculty; and
- Integrates high school and college study in an articulated program.

Each ECHS develops a unique vision and a learning environment that represents community interests and student needs. However, according to the ECHSI (2008), all ECHS share the following characteristics:

Students have the opportunity to earn an Associate’s degree or up to two years of transferable college credit while in high school. Mastery and competence are rewarded with enrollment in college-level courses and the opportunity to earn two years of college credit for free. The years to a postsecondary degree are compressed. The middle grades are included in the school, or there is outreach to middle-grade students to promote academic preparation and awareness of the early college high school option. Schools provide academic and social supports that help students succeed in a challenging course of study. Learning takes place in small, personalized learning environments that demand rigorous, high-quality work and provide extensive support. The physical transition between high school and college is eliminated—and with it the need to apply for college and for financial aid during the last year of high school. (p.3).

The partners involved in creating an ECHS are the leaders of the high school itself, the postsecondary partner, school district leadership, community-based organizations, community based agencies, teachers’ union, tribal governments, business/industry partners, and local policymakers. A multi-year Memorandum of Understanding, charter, or agreement between secondary and postsecondary institutions is facilitated to outline essential design components in an ideal arrangement, according to the ECHSI:

- Mission
- Academic Plan
- Roles and Responsibilities
- Staffing
- Facilities
- Student support
- Professional Development
- Prerequisites for college enrollment
- Payment of fees, tuition, books, liability, transportation and food.

The college president and board identify the value of the ECHS to the college to generate increased and sustained support during the beginning phase of operations. The postsecondary partner (e.g., provost, deans, assistant to the president, faculty) will remain an integral part of the planning team for the ECHS (ECHSI, 2008).

A vision and mission is developed for each ECHS that is consistent with ECHSI principles and acts as a strategy for establishing a shared mission with parents/guardians, students, faculty, staff, and school administrators. The vision and mission of the ECHS is intended to be introduced to representatives of academic partners by the school and postsecondary partner leaders. Therefore, postsecondary academic departments are encouraged to be engaged in ongoing curriculum and instruction planning with high school faculty.

Leaders of the ECHS collaborate to develop a school design plan to structure the school day; address state, district, and college requirements; define paths to achieve up to two years of credit; and define academic and social supports (ECHSI, 2008).

Attributes of the ECHS model are met during the design phase, such as:

- Shared, clear, high expectations and standards, with all students completing a coherent, rigorous course of study
- Small, personalized learning environment
- Technology is used as a tool for designing and delivering engaging curricula.

School leaders identify classroom and administrative space on a college campus; whether the ECHS is on or off campus, a college-going culture is promoted. This is achieved by offering orientation activities, college identification cards, access to college

facilities, offering seminars on campus, and mentoring or tutoring programs (ECHSI, 2008).

The first priority for school leaders is the inclusion of parental and family involvement. A process is developed for parental involvement, including ways to introduce families and parents/guardians to the school and to provide ongoing opportunities for input regarding school development. A close second priority is the focus on developing a process for community engagement to introduce community partners to the school and provide the same ongoing opportunities that would be extended to families. Community engagement can be offered via informational meetings, town meetings, and forums to encourage buy-in related to school vision and mission (ECHSI, 2008). Once these initial opportunities have been offered, further outreach can be accomplished by school leaders in the form of community outreach and student recruitment materials that convey school mission, organization, and design.

The selection of the ECHS students and the teachers who will instruct them is the first factor of implementation that is considered. A recruitment plan is developed to assist in identifying parameters that are specific and appropriate to reach the targeted students of the ECHS model. The selection criteria include key stakeholders. Highly qualified secondary and postsecondary faculty who are successful working with the target population of students is a key focus. Professional development is orchestrated by leaders from both institutions and high school faculty. It is based on data on incoming students and the needs of teachers. It allows for ongoing collaborative learning and

provides ongoing support for teachers. Further proactive planning around the area of professional development includes a common planning time for teachers and the identification of professional development providers.

A student support strategy is articulated among stakeholders that includes support for academics and support from faculty. This strategy specifies how each student will be known by faculty and staff – well enough to identify each student’s personal strengths, challenges and goals (ECHSI, 2008). Leadership ensures agencies are identified that provide services to students that are unavailable in the school.

The issue of student responsibility is addressed with the creation of a process that hears and responds to student voice. In the same instance, clear discipline policies and consequences are established. This information is shared with parents, students and staff to cultivate an environment of open dialogue for proactive action. A parallel concern involves the issue of student attendance and persistence. Early intervention strategies can be utilized to motivate student attendance and encourage persistence.

Appropriate, culturally-sensitive materials are offered to the targeted student population of the ECHS. In order to meet a wide range of needs, these materials are delivered via effective instructional strategies. The challenge of preparing students for success in a rigorous academic program is understood by stakeholders. It is determined how to appropriately integrate technology and instruction, and to provide students hands-on experiences with these lessons.

The assessment needs of students are planned according to data obtained from student records. Student strengths and challenges are at the forefront when designing academic programs. An important consideration is allotted for identifying processes whereby students are enabled to assess their own learning.

Key stakeholders develop a plan to ensure smooth transition from secondary to postsecondary education. The identification of transferrable courses, articulation options, and requirements to enter public postsecondary institutions are key considerations during the development of this plan. The other areas that have historically proven to be frustrating for the target population are applying for financial aid and preparing for college entrance exams. It is prudent for school leadership to work with counselors, faculty, and staff to provide extended services to address these two areas of college access.

The design of ECHS is carefully crafted to align and blend the secondary and postsecondary experiences for youth historically underrepresented in higher education. ECHS counter commonly held expectations for these students and set them on a path toward academic and career success.

In order to avoid the challenges of sustainability planning, it is imperative for key ECHS stakeholders to address policy and funding. There are important long-term policy and funding needs involved in the operation of an ECHS. Supportive policies for an ECHS are achieved through careful planning and an emphasis on consistency and follow-through on the part of school leadership. ECHS leadership can focus on an

ongoing education campaign of key policymakers and legislators to inform them about ECHS activities. Activities to achieve this endeavor could involve meeting with the staff of policymakers and legislators, inviting them to the school, and encouraging ECHS employees to present at conferences (ECHSI, 2008). Short-term financing involves a five-year budget developed by key stakeholders. Long-term financing involves recruiting new business and community partners.

Benchmarks of Effectiveness

The effectiveness benchmarks were developed collaboratively by the early college intermediary organizations. The effectiveness benchmarks establish a set of ideals to which all early college high schools strive. It serves as a planning, improvement, and teaching tool that can help intermediaries, school leaders, and postsecondary partners guide an early college high school's growth (ECHSI, 2008). There are three phases included in each benchmark: beginning, implementing and realizing. The beginning phase is the pre-implementation planning, which occurs prior to school opening. The implementing phase is the intermediate school development phase prior to the school's first graduating class. The realizing phase is the period of full school implementation, once a school has reached its full planned enrollment and has graduated its first class. They represent a framework for a continuum of indicators of school progress and success. Their major value is in providing a set of standards to guide continuous development and improvement in key areas.

There are a total of seven benchmarks that are collectively utilized as a tool for ECHS stakeholders:

1. Students completing early college high schools graduate with a high school diploma and up to two years of college credit. Areas benchmarked are:
 - A. Student attendance
 - B. Student persistence
 - C. Graduation rates
 - D. College credit and degrees
2. Early college high schools establish the enabling conditions necessary to prepare students for success in a rigorous, well-structured academic program leading to high school graduation and up to two years of college credit. Areas benchmarked are:
 - A. Mission
 - B. Leadership
 - C. School culture and design
 - D. Location
 - E. Student recruitment and selection
 - F. Teacher retention
3. Early college high schools provide comprehensive student supports based on students' academic and social needs. Areas benchmarked are:
 - A. Personalization
 - B. Respect, responsibility, and safety
 - C. Transfer and articulation plans
4. Early college high schools demonstrate effective instructional practices. Areas benchmarked are:
 - A. Curriculum and instruction
 - B. Student assessment
 - C. Continuous improvement

- D. Professional development
- 5. Early college high schools establish and institutionalize strong secondary/postsecondary partnerships to ensure student success. Areas benchmarked are:
 - A. Collaborative leadership
 - B. Agreements
 - C. Planning and coordination
- 6. Early college high schools engage students, parents, community, business, and public agencies in developing and sustaining the schools. Areas benchmarked are:
 - A. Leadership
 - B. Outreach and recruitment
 - C. Parent/family involvement
 - D. Community engagement
- 7. Early college high schools develop plans for sustainability. Areas benchmarked are:
 - A. Policy
 - B. Financing
 - C. Long-term school sustainability

The Development and Evolution of Early College High Schools

National Focus

The impact of ECHS since their inception eight years ago has produced promising results. The central idea to serve students who have been underserved in education is currently materializing through the work of ECHS. Information gathered by

the Early College High School Initiative (ECHSI, 2008) for the 2006-2007 school year indicates:

- Over 20,000 students in 24 states attended ECHS.
- Two-thirds of students enrolled in ECHS were African-American or Hispanic.
- Eight ECHS targeted and served Native-American students.
- Twelve schools specifically served students who previously dropped out or were unsuccessful in traditional high schools.
- The majority of students enrolled in ECHS across the nation were first-generation college students.
- Nearly 60 percent of ECHS were eligible for free and reduced lunch.

The State of Texas

The Education Commission of the States released the report, *Closing the College Participation Gap: A National Summary* (2003), which stated that among U.S. adults age 25 and older, 47.5% of Hispanics have less than a high school credential and 14.7% have an associate's degree or higher – the highest and lowest percentages in each respective category among all other races/ethnicities. The U.S. Census Bureau indicates the population of Texas in 2006 consisted of nearly three times as many Hispanics than the nation as a whole. Texas has the country's second-highest Hispanic population, behind only California. The Texas State Data Center (2008) projects that by 2020, Hispanics will make up the majority of Texas' population.

The projected changes in demographics in Texas' border cities, which already have high populations of Hispanics, are even more dramatic. For example, El Paso is 78.2 percent Hispanic now, will likely increase to 90.3 percent by 2040 (Texas State

Data Center, 2008). According to the Pew Hispanic Center (2008), in 2000, more than half the Hispanic population in Texas did not have a high school diploma; and Hispanics were half as likely as Anglos to graduate from college with a bachelor's degree by age 26 (23.2 percent for Hispanics versus 47.3 percent for Anglos).

Hispanics are expected to make up the majority of the labor force in Texas by 2040 (Toossi, 2002). If the disparity between Anglo and non-Anglo high school and college graduation rates continues, the Texas economy would face numerous serious challenges. It is projected by 2040 that approximately 30.1 percent of the labor force will not have a high school diploma, up from 18.8 percent in 2000 (Texas Data Center, 2008). If this occurs, a large portion of Texas' workforce would be less educated and low skilled, which would lead to a less competitive Texas economy. An increasing number of less-educated laborers would reduce the average income of Texans and in turn decrease tax revenues collected by the state. For the Texas economy to remain robust, it is essential that the state's education system make progress on at least two fronts: (1) investing to improve overall student achievement, and (2) implementing programs that bridge the educational attainment gap between racial and ethnic groups. Early college high schools are designed to help bridge this gap.

ECHS in Texas receive important guidance from the Texas Education Agency (TEA) and the Texas Higher Education Coordinating Board (THECB). The schools are in line with state education goals to increase postsecondary attainment and align curricula and standard across high schools and colleges (Heckman, 2008). There is a

culture of collaboration among secondary and postsecondary policymakers, which supports integrated approaches like early college high schools. During the 2006 special session, the Texas Legislature passed HB1 which included a requirement that every high school provide no less than 12 dual credit hours to students by 2008 (ECHSI, 2008). Clearly, the state of Texas has taken actions to promote high school reform which is consistent with the P-16 vision.

In 2005, the Texas legislature enacted Senate Bill 1146 which required the Commissioner of Education to establish and administer an ECHS program; it defined the program and required that articulation agreements between school districts and their postsecondary partners address key issues (ECHSI, 2006). The bill also gave the Commissioner rulemaking authority over the program. The effort to develop ECHS across Texas benefits from two funding streams: one administered by the TEA, and the other is managed by the Communities Foundation of Texas (CFT).

Communities Foundation of Texas traces its roots back to 1953. Since then, more than \$900 million in grants have been made by the Dallas based foundation, and it has grown to become one of the largest community foundations in the nation. CFT serves as the fiscal agent and program manager for the majority of the philanthropic funds for what is called the Texas High School Project (THSP).

Since its inception in 2003, the THSP has focused its efforts on high-need schools and districts statewide with an emphasis on urban areas and the Texas-Mexico border. Public and private organizations in the THSP include the TEA, the Texas

Governor's Office, the Texas Legislature, the Bill & Melinda Gates Foundation, the Michael & Susan Dell Foundation, CFT, and National Instruments. THSP private philanthropic investments are managed by CFT. State and federal investments in Texas schools are managed by TEA. THSP focuses its efforts on innovative high school reform projects such as the creation of early college high schools. THSP is a \$261 million public private initiative dedicated to ensuring that many underrepresented Texas students leave high school prepared for college and career success in the 21st century economy (ECHSI, 2006).

El Paso, Texas

The population of El Paso, Texas is majority minority: Hispanics account for 80% of the people residing in the area (Rhodes, 2008). The population is also young and poor: fully 32% are under the age of 18 and more than a quarter of the city's children live below the poverty level. The median household income is \$32,111 (Rhodes, 2008). Median family income in El Paso is only 73% of the state norm; per capita income is 32% below the state figure (The Rio Grande Council of Governments, 2003). Although a number of factors influence the generally lower incomes of El Paso County families and individuals, two in particular stand out. El Paso has a significantly higher percentage of its population with less than a high school education: 34.2% versus 24.4% for the state as a whole; and a lower percentage with baccalaureate or advanced degrees: 16.6% versus 23.2% (The Rio Grande Council of Governments, 2003).

The El Paso County Community College District was established by a vote of El Paso citizens in June 1969. In September 1973, the doors opened, and 902 students enrolled. In 1974, the college expanded from leased facilities at Fort Bliss to a complex of downtown buildings bought with money from a Project Hope grant. Currently, 85.5% of EPCC students are Hispanic, reflecting the community of El Paso; 70% are first-generation college students (Rhodes, 2008).

EPCC consists of five campuses, an administrative services center, and four educational/occupational outreach centers serving the military, the homeless, and career and business development needs of the district. The campuses and service centers are strategically located in the population centers throughout El Paso: Northwest Campus (north); Rio Grande Campus (southwest); the Administrative Services Center and Fort Bliss (central); the Career Training Center and Valle Verde Campus (south-central); the Lomaland Center and Mission Del Paso Campus (east); and the northeast Transmountain Campus (El Paso Community College, 2008).

EPCC is one of the fastest growing community colleges in Texas, according to Dr. Richard Rhodes, president of EPCC. The institution awards more associate degrees to Hispanic students than any community college in the country. EPCC offers over 130 academic programs and 350 continuing education courses to more than 24,000 credit students and 8,000 noncredit students. EPCC is the leading provider of training for local business and industry (El Paso Community College, 2008).

El Paso Community College is a partner in four early college high schools. MECHS, in SISD, is one of the four ECHS in partnership with EPCC. Valle Verde Early College High School is part of the Ysleta Independent School District and opened a year after MECHS, in 2007. Northwest Early College High School, part of the Canutillo Independent School District and Transmountain Early College High School, part of the El Paso Independent School District, both opened in the summer of 2008 (MECHS Principal, 2008).

SISD is located in the southeastern portion of El Paso County, Texas. It serves Socorro, Horizon City, and the eastern portion of the City of El Paso. The District covers 136 square miles of El Paso County. The District's northern boundary is the Texas/New Mexico line and its southern boundary is the Rio Grande River. SISD is one of the fastest growing school districts in the state of Texas (Aguirre, 2008). The District has twenty-five (25) elementary schools, fourteen (14) middle schools, six (6) high schools, one (1) alternative school and a community education program.

Mission Early College High School is a collaborative effort between the Community Foundation of Texas, the Texas High School Project, El Paso Community College, and Socorro Independent School District. The school is located on the Mission del Paso campus of EPCC in El Paso, Texas. MECHS opened its doors for the 2006-2007 academic year, enrolling 125 students in the freshman class. In 2008-2009, there were 135 ninth graders, 115 tenth graders, and 115 eleventh graders (MECHS Principal, 2008).

CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this research project was to gain authentic insights into the current operation of early college high schools. Although various methods and approaches could be employed in this endeavor, the decision was made to focus on the insights of students currently enrolled in this type of school. More specifically, the decision was made to investigate how current students perceive the early college high school served their needs and met their expectations.

The methodology selected as appropriate for the study involves the use of qualitative research coupled with the case study method. This chapter presents an explanation of the research concepts, the development of research questions, details of the research design, methods of data collection, and related topics.

Qualitative Research and Case Study Methodology

In conducting qualitative research, the principal investigator or researcher is the key instrument. Qualitative research provides insights into the participants' voices, patterns, and personal perspectives (Gall, Borg, & Gall, 1996; Gay & Airasian, 2003). A qualitative design allows for an in-depth, detailed approach and freedom from preconceived categories (Patton, 1990).

Creswell (1998) offered five criteria for qualitative research: (a) research questions that begin with the words "how" and "what"; (b) the need to explore the

assigned topic; (c) the need to provide a detailed view of the topic; (d) the need to study subjects in their natural setting; and (e) writing about the topic in an approved literary style.

The researcher relies on data offered by the participants where patterns and concepts emerge, leading to the development of themes and categories that explain the topic(s) and phenomenon of interest through observation, documentation, and thoughtful analysis.

The naturalistic inquiry paradigm guided the research design for this study (Guba & Lincoln, 1985). The qualitative approach allows for descriptive questions that are concerned with “meaning.” Bogdan and Biklen (2003) state that qualitative research is concerned with how people make sense of their lives. The qualitative approach is focused on theory generation rather than theory testing. Because qualitative research involves inductive analysis, researchers do not search out evidence to prove or disprove a hypothesis, rather the hypotheses are built as data are gathered and analyzed (Bogdan & Biklen, 2003). This approach utilizes multiple data sources, is naturalistic, involves inductive analysis, and utilizes descriptive data.

For a study regarding perception, a case study approach is appropriate for capturing the participants’ engagement and for understanding how they interpret their experiences. Bogdan and Bilken (2003) define a case study as “a detailed examination of one setting” that may involve a specific group of people or a particular place (p. 54-55).

“The acceptance of case studies as a viable research tool has reemerged...because people want a convenient and meaningful technique to capture a time-framed picture of an...aggregate that can be construed as...collective-characteristics and performance” (Bachor, 2000). Furthermore, this study sought to capitalize on the advantage of case studies to provide MECHS administrators illuminating stories about their school (Davies, 2005). This research did not intend to change environments or subjects. The decision to utilize descriptive research is based upon this intention.

This study also is classified as formative evaluation. Formative evaluation is typically conducted during the development or improvement of a program and it is designed for in-house staff of the program with the intent to improve the program (Scriven, 1991). Unlike summative evaluations, which examine the effects or outcomes of a program, formative evaluation examines the delivery of a program while it is in process (Scriven, p. 199).

Overview of the Research Design

The research design for the case study of Mission Early College High School included four elements. The primary data collected was secured from individual semi-structured interviews of MECHS student who were in their third year of study. Supplemental data sources included (1) a descriptive profile of MECHS based on information gathered from the school staff regarding the history, structure, and operations of the organization; (2) documented observations by the researcher of two

classes which included students who were to be interviewed; and (3) a focus group interview with three teachers engaged in the education of the third year students. The results of the research are presented in Chapter Four.

Benchmarks of Effectiveness: The Foundation for the Research Questions

The underlying premise that set the stage for the study was based on the effectiveness benchmarks created by the Early College High School Initiative (ECHSI), as described in Chapter Two (p. 42-45). The ECHSI benchmarks provided the foundation for the study. The four selected benchmarks used for this study were:

1. Early College High Schools establish the enabling conditions necessary to prepare students for success in a rigorous, well-structured academic program leading to high school graduation and up to two years of college credit.
2. Early College High Schools provide comprehensive student supports based on students' academic and social needs.
3. Early College High Schools demonstrate effective instructional practices.
4. Early College High Schools engage students, parents, community, business, and public agencies in developing and sustaining the schools.

Development of Research Questions

The research questions were based on the selected ECHSI benchmarks as described above:

1. What are students' perceptions of how Mission Early College High School is preparing them for both high school graduation and completion of up to two years of college credit?

2. What are students' perceptions of how Mission Early College High School is providing comprehensive student supports based on their academic and social needs?
3. What are students' perceptions of how Mission Early College High School is demonstrating effective instructional practices?
4. What are students' perceptions of how Mission Early College High School is engaging students, parents, community, business, and public agencies in developing and sustaining the school?

Development of Interview Questions

Interview-based data was collected from personal, semi-structured interviews with the students and a focus group interview with teachers. These methods were employed because they gave the researcher the ability to gather pertinent information on emerging themes and also provided the interview participants the freedom to elaborate on ideas and express their thoughts regarding any issue about which they had strong feelings. Bogdan and Biklen (2003) state good qualitative interviews allow subjects to feel at ease and talk freely about their points of view.

Student Interview Questions

The student interview questions (see Appendix A) were developed based on details provided in the ECHSI benchmarks of effectiveness. The first selected benchmark was utilized to develop questions pertaining to school mission; school culture; school design; school location; student recruitment and selection; and teacher retention. The second benchmark was utilized to develop questions pertaining to

personalization; respect, responsibility, and safety; and transfer and articulation plans. The third selected benchmark examined issues pertaining to curriculum and instruction. The final selected benchmark was utilized to provide questions pertaining to school leadership and parental/family involvement.

Student Interview questions #1 through #5 addressed the first ECHSI benchmark of the effectiveness of ECHS: “Early College High Schools establish the enabling conditions necessary to prepare students for success in a rigorous, well-structured academic program leading to high school graduation and up to two years of college credit” (ECHSI, 2008). Specific areas evaluated with these questions included school mission; school culture; school design; school location; student recruitment and selection; and teacher retention.

Questions #6 through #12 addressed the third ECHSI benchmark of the effectiveness of ECHS: “Early College High Schools provide comprehensive student supports based on students’ academic and social needs” (ECHSI, 2008). Specific areas evaluated with these questions of the interview included personalization; respect, responsibility, and safety; and transfer and articulation plans.

Questions #13 and #14 addressed the fourth ECHSI benchmark of the effectiveness of ECHS: “Early College High Schools demonstrate effective instructional practices” (ECHSI, 2008). These questions focused on curriculum and instruction.

Questions #15 and #16 addressed the sixth ECHSI benchmark of the effectiveness of the ECHS: “Early College High Schools engage students, parents,

community, business, and public agencies in developing and sustaining the schools” (ECHSI, 2008). Specific area evaluated in the final two questions included school leadership and parental/family involvement.

The questions were consistent with Patton’s (2002) recommended general function for interview questions:

1. Opinion and value questions reveal how participants view and think about their own behaviors and experiences.
2. Feeling questions seek to determine how participants feel or react emotionally about their personal experiences.
3. Knowledge questions seek to find what participants know.
4. Experience and behavior questions seek to discover what participants have done.
5. Background questions seek to learn personal details about the participants.

Teacher Focus Group Questions

The teacher focus group interview (see Appendix B) consisted of ten questions. Questions #1 through #3 were similar to the first three student questions and addressed the first ECHSI benchmark of the effectiveness of ECHS: “Early College High Schools establish the enabling conditions necessary to prepare students for success in a rigorous, well-structured academic program leading to high school graduation and up to two years of college credit” (ECHSI, 2008).

Questions #4 through #6 mirrored the student interview questions in the same order. The questions addressed the third ECHSI benchmark of the effectiveness of

ECHS: “Early College High Schools provide comprehensive student supports based on students’ academic and social needs” (ECHSI, 2008).

Questions #7 through #10 addressed instruction, college-going behavior of the students, technology and the MECHS culture. The questions also addressed the fourth ECHSI benchmark of the effectiveness of ECHS: “Early College High Schools demonstrate effective instructional practices”, and the sixth ECHSI benchmark of the effectiveness of the ECHS: “Early College High Schools engage students, parents, community, business, and public agencies in developing and sustaining the schools” (ECHSI, 2008).

Selection of Research Location and Participants

The research location for this study was Mission Early College High School (MECHS) located in El Paso, Texas. MECHS is physically housed on the EPCC campus in El Paso County. The school was selected because it is the first of its kind in west Texas, its proximity to the researcher’s home, and the administrative leadership guiding the school.

Because the high school was in its third year of existence, the student sample was based on the criteria that the participant must be a junior at the high school. Since the total junior class enrollment was a relatively small number, the researcher petitioned the majority of juniors to volunteer to participate. Juniors were provided a description of the proposed study in one of their regularly scheduled classes. They were informed about the purpose of the study and provided information about how it was designed.

Following the description and assurances of confidentiality and anonymity, students were provided a sealable envelope, a parent consent letter with child assent (see Appendix D) containing a detailed description of the study, and a personal information contact card. Students were instructed to complete the card with the contact information only if they would agree to follow-up personal interviews. When the sealed envelopes were collected, 13 were returned; ten of the students were female and three were male. The composition of the junior class by gender was 60 % female and 40 % male.

There was one teacher focus group interview consisting of three teachers who taught junior students on the high school campus. Each teacher who agreed to participate in the focus group interview completed a consent form (see Appendix E). Two male teachers and one female teacher participated in the focus group interview. The composition of the MECHS faculty by gender was eight male teachers and 13 female teachers.

Methods of Data Collection

Interviews

The researcher began collecting data on April 1, 2009. All of the student interviews were conducted on April 2 and April 3 in the principal's conference area on the high school campus during the students' free time before, during, or after school. Forty-five minutes to one hour open-ended interviews were conducted by the researcher. The teacher focus group interview was conducted on April 2 and completed in one hour.

The goal of the open-ended interview technique was to learn how participants interpret particular aspects of their lives and experiences in their own words. The questions were formulated from general to specific as the interview progressed so that the participants were able to influence both the content and pace of the interview (Strauss & Corbin, 1990).

To ensure accuracy and validity, the interviews were transcribed verbatim with permission from each interviewee. The researcher also offered participants the opportunity to review their transcribed interview to ensure accuracy and to certify that comments retained their original and intended content.

Classroom Observation

In order to acquire firsthand knowledge of student engagement as demonstrated in the classroom setting, the researcher observed two classes prior to conducting the personal interviews. In these classroom observations, the researcher recorded notes regarding various elements of engagement, such as behavior, class participation, attention to instructions and tasks, and effort levels. Further, the researcher noted the teachers' pedagogical approach, the nature of the students' work and assignments for that class period, the teachers' willingness to answer questions and provide personal assistance and establish rapport, and the level and nature of the interactions between the students and the teachers. Immediately following these classroom observations, the researcher transcribed and organized her hand-written notes and thoughts into a more detailed and organized typewritten format. This transcription was utilized for clarity and

to retain information that may have been compromised over time if only committed to memory.

Data Analysis Protocol

Five steps are recommended for use in analyzing data: (a) read all data to get a sense of the whole; (b) break down the data to generate topics; (c) compare the information to reduce duplication; (d) develop a preliminary classification system; and (e) refine the classification (Gay & Airasian, 2003). The researcher used these steps in her analysis.

The process of reduction assists in dividing the information into relevant parts and units, within a holistic perspective. Most researchers agree that large chunks of information are difficult to handle, process, and evaluate after the information has been fully read (Gay & Airasian, 2003). This study's process of reduction was holistic; it divided information into relevant parts and units.

The data were collected, analyzed, and separated into large categories and themes. Guba and Lincoln (1985) note that data analysis is an ongoing process where the researcher analyzes data after interviews. Interviews are transcribed, and the information is then assimilated to form the basis of emergent themes. The qualitative method provides insight into participants' voices, patterns, and personal perspectives (Gall, Borg, & Gall, 1996; Gay & Airasian, 2003).

Qualitative studies look at participants and their personal experiences. In some

cases, qualitative studies involve several participants with a focus on a single issue (Creswell, 1998). This project was an exploratory case study, as defined by Creswell (1998). This case study evaluated the perceptions of participants over a period of time in which they were part of the observed ECHS program. The researcher utilized 16 participants 13 of whom were students interviewed individually and three teachers who were included in the focus group interview.

Data were drawn from multiple sources through interviews, observations, and fieldnotes collected during the course of the study. After collecting the data, certain themes emerged that were common to all participants. Interpretation and synthesis was the final stage where assertions were made regarding the common and emergent themes. The information was presented in a narrative form. The research format followed the dimensions of qualitative research as described by Creswell (1998).

The data analysis was inductive in that the analysis shifted from specific to broad information for qualitative data analysis (Gay & Airasian, 2003; McMillan & Schymacher, 1997). This approach permitted the identification of the categories and patterns from the data collected. Data consist of participant assertions about their experiences. The subjects provided the data from their interviews, which were then synthesized into emergent themes.

After collecting data, the review and segmentation process began. Information was segmented into relevant parts to help identify emergent themes. The data underwent a categorization process as identified by Gay & Airasian (2003). During this phase,

emergent themes were identified through the breakdown of interviews where common characteristics and categories were also identified. Data gathered were used to answer the research question(s). After grouping common characteristics of each topic segment, information was compared and contrasted to identify similarities and distinctions between categories to discover patterns to help answer the research question(s). Emergent themes were identified with common characteristics used to support those themes. Sub-themes common to all of the participants also emerged. Assertions were used to support and validate common themes and sub-themes. The final stage was the synthesis and interpretation of the data.

Validity

Validity must be seen from the “perspective of the paradigm” through which the research is executed (Merriam, 2002). Because the goal of qualitative research is not to establish laws, questions of validity and reliability should be addressed in ways that are dissimilar to quantitative research.

In this study, validity issues were addressed that were consistent with the strategies suggested by Merriam (2002). The incorporation of multiple data sources confirms, to the extent it can be confirmed, that what was conveyed was perceived as truthful and reported truthfully. The researcher also employed member checks to establish validity. In this study, the interviewees were allowed to review transcripts and field notes pertinent to their participation to verify the events and responses as recorded, as outlined in the consent form.

Consistent with Merriam's (2002) proposed use of subjectivity statements, the researcher included a statement of bias in this study. In this subjectivity statement, the researcher documented personal feelings and encounters with the subjects being studied, the setting that was used for the study, and motivations for undertaking the study.

Triangulation

Triangulation is the use of multiple data sources in a study (Bogdan & Biklen, 2003). The researcher used multiple sources of data to achieve triangulation. The sources in this study were personal interviews, observation, and field notes. Multiple student subjects were interviewed for this study using the same criteria and interview guide. These responses were tape recorded to allow for thorough and multiple examinations, and field notes related to the interviews were examined.

The researcher also employed personal observation to obtain data for this study. During the classroom observations, the researcher recorded detailed notes of student and teacher behavior, subject matter, classroom setting, verbal exchanges, body language, pace of instruction, teaching style, and time management. Immediately following the observations, the researcher enhanced her notes and further elaborated on what was observed while the information was fresh rather than risking the compromises of memory and elapsed time.

These methods of data collection allowed the researcher to examine the research questions from multiple perspectives. The multiple data sources permitted the researcher

to draw conclusions and make determinations regarding students' perceptions of the effectiveness of their school.

Reliability

Reliability in positivistic studies refers to the assumption that repeated measures and methods will produce like results. Reliability is problematic in qualitative research. Due to the fact that human behavior is not static (Merriam, 2002), and personal interaction/behaviors are never consistent, the notion of reliability should be better applied in terms of "dependability."

Generalizability

Qualitative research is concerned with the accurate recording of what occurs in a research setting rather than with determining if the findings hold up beyond the specific research subjects and settings involved in a particular study (Bogdan & Biklen, 2003). Because of the small sampling of this study, the researcher acknowledges the limited generalizability of this study. Further, there are no compelling reasons to determine if the students are typical or atypical of other Early College High Schools across the United States. This uncertainty may result from the attitudes of the students in the study; the attitudes, focus, and philosophy of the community college partner; and the ethnic composition of the ECHS. The generalizability determination is, therefore, left to subsequent research and professionals conducting similar research to conclude its fit into the general scheme of their work (Bogdan & Biklen, 2003).

Ethical Concerns

Participants were provided with a precise description of data collection methods prior to taking part in the study. The researcher was explicit about the procedures and how the results would be utilized. The voluntary nature of the study was emphasized. Representatives and participants of MECHS and EPCC were not compensated for their contributions. At no point was compensation offered or inferred during the course of the research. These descriptions were stated on the informed consent form.

To protect the rights of the participants in this study, the researcher procured the authority of the Institutional Review Board (IRB) for the Use of Human Subjects in Research at The University of Texas at Austin to conduct the research. IRB approval was granted for the study on March 31, 2009 (See Appendix C). There were no risks involved to the participants in this study. Participants were advised that neither their participation nor the study results would influence the grading system in their program. They were also advised that there would be no adverse consequences for not participating in the study.

Participants in this study were assured that their responses and participation would remain confidential. The following measures were taken to ensure the confidentiality of the study participants:

1. Data collected during the study were stored in a location to which only the researcher possessed accessibility.
2. The identities of the student interviewees were kept confidential and pseudonyms were used when the findings were recorded.

3. Any reference to instructors was kept anonymous.
4. Data that could compromise the confidentiality of the participants were destroyed upon the completion of the study.
5. Interview appointments were undisclosed.

Because the researcher was the primary data collection instrument in this qualitative study, the issue of researcher bias was a foremost concern. The researcher acknowledged certain biases and expectations. Assumptions and preconceived notions were noted and shared with members of the dissertation committee who monitored the study and were alert for evidence of bias.

CHAPTER FOUR: FINDINGS

Introduction

The purpose of this chapter is to report the results of the research data gathered from primary and secondary sources at Mission Early College High School. The presentation begins with a profile of the school with special emphasis on the junior class. The profile is followed by findings from the class observations and a teacher focus group interview. The chapter concludes with the information secured from the student participant interviews. These student-provided data are described, organized, and presented in accord with the four research questions:

1. What are students' perceptions of how Mission Early College High School is preparing them for both high school graduation and completion of up to two years of college credit?
2. What are students' perceptions of how Mission Early College High School is providing comprehensive student supports based on their academic and social needs?
3. What are students' perceptions of how Mission Early College High School is demonstrating effective instructional practices?
4. What are students' perceptions of how Mission Early College High School is engaging students, parents, community, business, and public agencies in developing and sustaining the school?

Mission Early College High School Profile

Key Aspects of Early College High Schools

The "early college" concept emerged in 2000, designed to provide an alternative path to higher education with dual credit as a central component. The schools provide

low-income youth, racial minorities, first-generation students, English language learners, and other students underrepresented in higher education an opportunity to earn both a high school diploma and an Associate's degree or up to two years of credit toward a Bachelor's degree. Since 2002, the partner organizations of the Early College High School Initiative (ECHSI) have started or redesigned almost 160 schools throughout the nation (ECHSI, 2008).

The ECHS program offers the alignment and blending of the secondary and postsecondary experiences for high school students by creating a college-focused environment. The critical element of its location on or near an institution of higher education (most often a community college) allows the early college high school student to be exposed to a rich variety of resources. The program also helps mediate the physical transition between high school and college. This leads its students on a path toward academic and career success.

A key aspect of an ECHS is its dual credit focus. Dual credit is a partnership between public institutions of higher education and secondary schools that allows students to receive college and high school credit for courses taken while in high school. In a traditional high school in Texas, students are restricted to enrollment in a maximum of two courses per semester which can be taken only when they are juniors or seniors. However, the Texas Higher Education Coordinating Board (THECB) exempts ECHS programs from the dual credit restrictions placed on traditional high schools (THECB, 2009). This unique exemption contributes to the central component of dual credit access

in the ECHS vision of enabling students to earn up to 60 hours of college credit (THECB, 2009).

The exemption allows ECHS students to enroll in more than two dual credit classes per semester in any level of classification (i.e., freshman, sophomore, junior or senior level). The dual credit courses are guaranteed to transfer to every Texas public college and university as part of the core curriculum (TEA, 2007). This attribute of an ECHS program provides the foundation for all students to aspire to graduate with both their high school diploma and an Associate's degree (or up to 60 hours of college credit).

In Texas, a Master's degree is the minimum educational credential required for instructors who teach dual credit courses. As a result of the state-mandated requirement and in order to achieve their goals, ECHS must employ teachers who (1) have discipline-appropriate Master's degrees and (2) are certified to teach college level courses by the regional accrediting organization which serves Texas, the Southern Association of Colleges and Schools (SACS).

Mission Early College High School Overview

The Socorro Independent School District (SISD) in El Paso, Texas and El Paso Community College (EPCC) worked together to create MECHS. The Mission Del Paso campus is the site of MECHS and the school opened its doors to the inaugural class in 2006. The facilities of MECHS consist of one main administrative building – a permanent structure located across the main parking lot of the college campus.

Numerous portable classrooms surround the main building, along with an employee/student/visitor parking lot. Due to its close proximity to Mission Del Paso's college campus, students are aided in their transition from high school to college. The ability of MECHS students to fully utilize all of EPCC's facilities is an additional unique component not found in traditional high schools. It is noteworthy that MECHS students are issued a college identification card and a library card to maximize their use of EPCC facilities.

There are several other aspects of MECHS to note, including its size; eligibility; and focus on academics. The school's small size (approximately 125 students per grade) is an intentional component of the academic design and provides students with the opportunity for individualized attention. Incoming high school ninth grade students who reside in the SISD are eligible to apply to MECHS. Because the focus of the program is primarily on teaching and learning, athletic teams are not part of the school design. However, there is a fine arts program that includes music, guitar, piano, orchestra, jazz band, choir, theatre arts and dance. There are also student clubs and organizations that focus on student curricular interests, academic advancement and social growth (SISD, 2008).

A Closer Look at Mission Early College High School

Student enrollment. Initial planning for the school began in 2005. The school opened its doors at the beginning of the 2006-2007 academic year with a freshman class of 125 students. At the end of the first academic year only five students had left the

program. Table 1 provides enrollment data for each of the three years that MECHS has been in operation.

Table 1: Beginning (B) and Completed (C) MECHS Students By Academic Year

Year	Freshman	Sophomore	Junior	Total Completed at End of Year
2006-2007	B=125, C=120	-	-	120
2007-2008	B=125, C=115	B=120, C=116	-	231
2008-2009	B=130, C=128	B=115, C=115	B=116, C=116	359

Student demographics. According to the 2007-2008 campus profile, 93.2% of MECHS students were Hispanic, 6% White, followed by equal percentages of African American and Native American students at 0.4% each (TEA, 2008). The attendance rate of MECHS students was 98.1% which significantly exceeded the statewide average of 95.5% (TEA, 2008).

Focus on teachers. The inaugural class of freshman students was instructed by seven MECHS teachers. In each academic year that followed, additional teachers were hired to accommodate the growing student body. A total of 18 teachers were employed during the 2007-2008 academic year, 21 in 2008-2009, with 24 projected for the 2009-2010 academic year. According to the most recent campus profile provided by TEA, 79.7% of MECHS teachers were Hispanic, with the remaining teachers listed as White (TEA, 2008). The average years of teaching experience was listed at 7.4, with an

average of 3.5 years teaching experience within SISD (TEA, 2008). A high number of the teachers employed by MECHS hold Master’s degrees and are certified to teach designated dual credit courses.

Dual credit courses. As highlighted in an earlier section in this chapter, the ECHS design relies substantially on the use of dual credit courses. Dual credit courses for MECHS students are primarily offered at the high school campus. While EPCC offers dual credit courses, MECHS students attend the college for concurrent enrollment courses in order to fulfill requirements for the Associate’s degree.

Table 2 illustrates the dual credit courses that most students are required to take in each year of their career at MECHS. As noted, the largest concentration of dual credit courses is in the junior year.

Table 2: MECHS Recommended Dual Credit Program

Freshman Year	Sophomore Year	Junior Year	Senior Year	Total Hours
Bio I & II (with lab)	Spanish I	U.S. History I & II	U.S. Gov. I & II	
EDUC 1300	Speech	Eng. I & II	Pre-Cal	
BCIS		Economics*		
14 hours	6 hours	15 hours	9 hours	

*Recommended for juniors during their MECHS academic year or during a EPCC summer semester

Curriculum. In the 2009-2010 academic year, several classes will be added for the first MECHS senior class including: British Literature and Anatomy/Physiology. According to the Assistant Principal of MECHS, “Individual degree requirements for each senior will be met in order to ensure graduation.” This statement encompasses the high school diploma and college degree (or college credit hours) requirements of each

MECHS senior. Each senior student will have specific course requirements, based on his or her chosen area of academic focus. The MECHS classes taught in 2008-2009, with dual credit courses in bold, are listed on Table 3.

Table 3: 2008-2009 MECHS Subjects and Classes

(Dual credit courses in bold)

Education	English	Career & Tech.	Fine Arts	Foreign Language	Health and P.E.	Math	Science	Social Studies
AVID* course (EDUC 1300)	Pre-AP Eng. I	Bus. Computer Info. Sys.	Music	Spanish I	Physical Ed.	Alg. I	Bio. I (with lab)	U.S. History I
	Pre-AP Eng. II		Speech	Spanish II		Alg. II	Bio. II (with lab)	U.S. History II
	English Lit.		Yearbook	Spanish III		Pre AP Alg. I		U.S. Gov. I
			Newspaper			Pre AP Alg. II	Chemistry	U.S. Gov. II
			Theatre Arts (Dance & Drama)			Geometry	Physics	World History I
						Pre-Cal.		World History II
						Calculus I		World Geography
						Economics		Ancient History

*Advancement Via Individual Advancement; See page 21

State rating. Each public school in Texas is rated annually by the TEA and receives one of the following four rankings: exemplary, recognized, academically acceptable or academically unacceptable. Campus accountability ratings are based on results of the state's proficiency assessment: Texas Assessment of Knowledge and Skills

(TAKS). There are two main criteria which qualify schools for an exemplary rating. One criterion involves at least 90% of students passing each TAKS subject test of Reading, Writing, Social Studies, Mathematics, and Science (TEA, 2008). It is noteworthy that in each of its three years of operation, MECHS has been rated exemplary.

Extracurricular activities. Although the focus is primarily on academics, MECHS provides extracurricular activities for student enrichment. There are a variety of student organizations: Yearbook Club; Science Bowl; Mock Trial Competition; Community Scholars Organization; National Honor Society; Business Professionals of America; and the school newspaper.

The Science Bowl is a game-show style competition with teams answering questions consisting of all areas of science, mathematics, and technology. The competition is sponsored by the Society for Hispanic Professional Engineers.

Mock Trial Competition is sponsored annually by the Young Lawyers Association and takes place the first weekend in February. All teams in Texas receive the same court case to prepare for competition. Teams are mentored by attorneys from their respective communities. MECHS competes on a professional level with schools from their regional areas. The top two teams advance to the State Competition in Austin, Texas.

Each summer, students from El Paso are chosen to work for the Community Scholars organization. They research local issues that impact El Paso and make their

professional presentations to City Council, County Commissioners Court, and other government and business entities.

The MECHS Business Professionals of America (BPA) Chapter achieved 27 first place awards in different individual and team categories at the 2009 BPA Regional Conference. The highest level of distinction awarded at the national level to students who demonstrate exceptional scholastic, leadership, and service qualities is the Ambassador Torch Award. In the spring of 2009, three MECHS students earned the award at state and national levels. MECHS is the only school from El Paso with student recipients of this award.

2008-2009 Mission Early College High School Juniors

The inaugural class at MECHS began with 125 freshman and ended with 120 completing the 2006-2007 academic year. During the first year, three of the five students who did not complete their freshman year moved to another city. In the 2007-2008 academic year, 116 of 120 students completed their sophomore year. During the second year, two of the four students moved to another city. In the 2008-2009 academic year, 116 of 116 students completed their junior year.

In regards to college readiness, the inaugural class of MECHS students proved to be a learning experience for the administrators responsible for creating the first early college high school in El Paso. According to the school's principal, administrators had assumed they would begin offering college-level courses during the students' junior and senior years; however, some of the freshman scored as college ready when given the

college readiness assessment test by EPCC. There were 25 students from the MECHS inaugural class who were identified as having the potential to complete Associate degree requirements at the end of their junior year (2008-2009 school year). The administrators of the school informed the 25 students of this possibility during their sophomore year. The school administrators and teachers committed to providing the guidance necessary to enable the students to earn their Associate's degree in May 2009. A total of 23 students committed to strive for this goal. On May 15, 2009 each of them graduated from EPCC with an Associate degree. The average age of the fourteen females and nine males was 17. These college graduates are scheduled to return to MECHS for their senior year and receive their high school diplomas in May 2010. Twenty-one of the 23 students were first-generation students. Their achievement was the first of its kind in the El Paso region.

While completing their high school graduation requirements in the 2009-2010 academic year, several of the 23 students intend to begin pursuit of their Bachelor's degree by taking upper division courses from The University of Texas at El Paso (UTEP), according to the school's principal.

Classroom Observation Findings

Classroom observations are one of the tools educational researchers use to build an understanding of the teaching and learning environment of a school. Two classrooms were observed for the purposes of this study. The classrooms that were observed were chosen because they were junior level classes being held at a time conducive to the

researcher's schedule. There was no advanced notice given to the teachers or students of the research observation date and time.

The first junior-level class observed was an English class in the first stages of examining one of Shakespeare's plays. The purpose of the lesson was well-defined and several resources were provided to support student learning (e.g., flexible classroom organization). Opportunities were made available for students to assure they understood the lesson. The teacher consistently asked the class if they were "clear" and offered to answer any questions during brief pauses in the whole-group lecture. The instruction connected previous learning to new learning when the teacher referred to past projects in a discussion about the project's requirements. Every student was given the opportunity to participate and contribute to the discussion. Students were actively engaged as evidenced by eye contact with the teacher, note taking, questions asked, and responses to the teacher's inquiries. The instruction included an application to real life when the teacher verbally cited a recent motion picture to illustrate the framework of the lesson's objectives. The majority of students responded positively to this technique and verbally confirmed understanding the objective of the lesson. The reference to the motion picture sparked a short discussion of the historical time period in question and how it related to the lesson. The students connected with the historical time period through the use of the film reference and through the text. Students were also given the opportunity to be involved during the selection process of assigning characters. The teacher asked whether

students wished to be assigned a particular character. This activity was an indication the teacher valued student choice and self-empowerment.

The second class observed was a junior-level Science class in the process of reviewing for an upcoming physics exam. Technology was integrated into instruction via the SMARTBoard and Power Point in the classroom and demonstrated the utilization of multimedia during classroom instruction. The students used the appropriate vocabulary of the disciplines being examined. The student and teacher dialogue created the elicitation of critical thinking, as students pondered parallel questions in reference to the presented material. During teacher engagement of student questions, critical thinking took place while purposeful and reflective dialogue emerged during the teacher-facilitated student discussion. One student asked a detailed question concerning sonic booms. While the teacher answered most of the student's questions, she invited the student to do further research to elaborate on the answer and then present his research to the class as a homework assignment. The student responded positively and displayed enthusiasm to follow through with the assignment. Several students commented on how they genuinely "were looking forward to his report."

A summary of the classroom observations is provided in Table 4. The summary is based on six categories of instruction. The categories were developed by the researcher using past experiences from teacher observations. The categories are consistent with commonly used teacher observation rubrics.

Table 4: Classroom Instruction Observation Summary

Observation	Organized	Authentic	Interactive	Learner-Centered	Inclusive	Continuous
Class #1	Well-defined lesson; Flexible classroom organization; opportunities for follow-up questions	Real-life situation application	Interaction with time periods in varied ways (e.g., text, film, dialogue)	Students were involved in the planning of instruction	Every student had opportunities to contribute	Connections were made to previous learning
Class #2	Learning via independent research; Technology integration	Appropriate subject vocabulary, as used in real-life work setting	Students' and teachers' dialogue develops critical thinking	Students were given opportunities to be problem-solvers	Every student had opportunities to contribute	Prior knowledge was accessed and built upon

Teacher Focus Group Perceptions

School Leadership

A common theme reported by all of the teacher participants was their impression of effective administrative leadership. Principals are crucial to the development and maintenance of effective schools, as one teacher explained:

When (MECHS Principal) has something that he wants us to do, we are willing to do it because of the collegial way he approaches everything. We know he has our best interest at heart because it is a student-centered school. It is a dream job as far as high school goes. I want to come to work every day because we have a proactive administration.

The importance of having a clear vision and mission at MECHS was echoed by all of the teacher participants. As one teacher stated,

I think (MECHS Principal and Assistant Principal) have done an excellent job creating and sharing the school's vision of approaching everything with a college-first mentality. It's one of the things (MECHS Principal) looks for when he is interviewing for teachers: Do they have the mentality to buy into what we are asking of them?

A sense of loyalty to the administration of the school was clearly conveyed through several statements. One teacher explained, "We have a very open-minded administration that trusts us to do our jobs and lends itself to being an easier environment to work for." Another teacher reported her upmost respect for the administrator:

He is awesome. I have taught for 30 years and administrators have come and gone – I have respected very few, very few. He has my respect because of the culture he promotes here and the people he has hired. He doesn't hire his friends or family member's friends; he hires only the most highly qualified teachers. From that, we know he is truly on our side.

School Design: Location and Size

The teacher participants unanimously agreed that proximity to EPCC was central in meeting the diverse needs of MECHS student. One teacher participant stated,

Really, with being so close to the college, I think that lends itself to greater access of facilities that we might not have (at MECHS). The proximity of the college gives the students the confidence that they are not limited or regulated to this campus. They can go over there and use what they need and know that they are trusted to behave accordingly.

The teacher participants unanimously reported that certain facilities were lacking. More specifically, a need for more classroom space and the overdue cafeteria currently under construction were cited as the most pressing issues in terms of on-campus facility needs. One teacher participant explained his sentiment:

We only have one lab so we still need more lab space. We just started building our cafeteria and we've been here for three years. So, there are definitely things that we could use but we are still able to get by on the ingenuity of the teachers we have here. We find a way, so no real serious complaints, but they are issues I'm concerned about.

When asked for additional comments concerning adequacy of facilities at MECHS, one teacher participant expressed empathy: "Our principal can only do so much because of other decisions that are facilitated by the Board. He can be constrained by these budgetary decisions."

Student/Family Support

All of the teacher participants reported the importance of delivering student/family support in achieving the mission of MECHS. One teacher expressed the need for a social worker or Community in Schools (CIS) involvement for student/family support at MECHS:

I have been at schools where they did have a social worker and those types of counselors. I was able to refer students and they could take it from there. I just think it would be in the best interest of everyone as the school grows to have a CIS officer here or a social worker, or both. Since it is a small school, maybe we could share those officers with option with another small school. We should have someone like that on campus at least once a week to offer that type of support.

Another teacher discussed the value of teachers' unconditional support for student success:

We make ourselves available. If the kids ever need extra help, we are asked to be there for them and every single teacher on this campus does it. I mean every, single teacher is willing to come in early to help with tutoring. Every single teacher is willing to give up their lunch period to help with tutoring. Every single teacher is willing to stay after school to help with tutoring.

One teacher participant placed an emphasis of the role of the principal in achieving an environment of student and parental support:

It is really a family atmosphere here – we are not just teachers and students. Everybody is really accepting of everyone else. That starts with the administration down to the teachers and the students pick up on that. Our principal is highly visible to everyone, not just with teachers but to students and their families...I think that gives us one more feather in our hat to be successful, that we know all of them very well.

Student Participant Perceptions

Research Question One Themes

What are students' perceptions of how Mission Early College High School is preparing them for both high school graduation and completion of up to two years of college credit?

Success is attainable. The entire student participants interviewed shared the same sentiments in that, “Most of us will be the first from our families, not only to graduate from high school, but to get an associate’s degree. It is something that just makes you feel very good about yourself.” The underlying goal of the program according to ECHS representatives is to enable students to graduate from high school and complete of up to two years of college credit. This level of satisfaction with the program was echoed by several students, specifically referring to their teachers’ support from the beginning of the program their freshman year: “You could tell that they wanted us to succeed – they wanted us to get a diploma and an associate’s degree.” A specific example given by a student participant illustrated the level of dedication to the school’s

mission of establishing enabling conditions to prepare students for success in a rigorous program:

(My teacher's) daughter was sick and she had to take her to the doctor. There were a lot of us who needed extra help that day so she changed her daughter's appointment to be here to help us. I thought that was very dedicated of her.

Student roles and responsibilities. According to the majority of students, MECHS has an environment where responsible behavior is expected. As one student explained, "They expect us to act mature. If you don't, you find out very quickly that they will nip it in the bud before it gets any worse." During a discussion of perceived student progress from their first year at MECHS to their junior year, one student reported: "...we've reached a level of maturity in that we can't come in here and start fights everyday and act like children! After all, we are college students – to some extent!" Another student relayed this same sentiment of feeling that they were college students and engaging in college student activities, both in and out of the school day: "We (students) will meet up on Saturdays – I love that, actually. It's kind of like a college thing where you get into groups with other classmates and you meet at Starbucks and discuss things from school to help each other." Another student communicated the importance of understanding a college-going culture, courtesy of MECHS:

We've learned so much here – it's amazing how much we have learned. We know what it takes to be college students because of our time here. We've learned study skills; we've learned how to become a leader, not a follower. We've learned how to manage our time and how to meet deadlines. All of these are important for your college life. Now, I know what I need to achieve my long and short-term goals as a college student.

Research Question Two Themes

What are students' perceptions of how Mission Early College High School is providing comprehensive student supports based on their academic and social needs?

Personalization. Based on data obtained from the open-ended student interview questions resulted in a majority of participants collectively expressed that MECHS teachers work actively to sustain their relationships with students: “The instructors know each student by name, they know what the student likes, they know how best each student grasps concepts. They know these things about every single student. They really do know us as people.” Another student further illustrated this point: “Most of the teachers get to know you very well. They know how you work and how you function as a learner. They get to know you pretty well.”

The administrators and front office staff were listed as additional means of support. One student reported she and her fellow classmates had discussed their observations of their administrators and the front office staff:

The people here in the office, if you tell them you are confused about something and you don't know what to do, they won't just brush you off. I'm talking about (MECHS Principal) and (MECHS Assistant Principal), too. They sit down with you and listen. They ask what it is you really need from them – they know everyone by name. All of them – they work together to help us. They are all really close to each other and that can only help (the students) – we all see that and talk about how lucky we are to be heard and not brushed off like they do in other schools.

Half of the student participants discussed how the relevance of their studies relates to their life success as a contributing citizen, a direct result of the personalization

apparent at MECHS. This connection had been instilled through their experiences at MECHS from their first year in the program:

We attended a two-week camp the summer we entered Mission. (MECHS administrators/teachers) told us what the standards and expectations would be once we began...this communicated to us what life really is: it's hard work and nobody is going to do it for you! You have to work hard to be successful in life – that's what we learn here.

Support to achieve higher-level work. The transition from a traditional high school to college is often a difficult process, and the type of preparation needed for this change varies among students. All of the student participants interviewed consistently stressed the importance of students taking full advantage of MECHS program benefits which included obtaining an early college experience that was unlikely to be achieved in a normal high school setting. They reported how beneficial it was for them to have supportive teachers from the onset of the program:

I never learned to develop good study habits in middle school and that is something that nearly defeated me at the beginning of my freshman year. I wasn't used to this environment. Now in our junior year we are now able to keep on track because when we first got here, a lot of us were overwhelmed. All the teachers helped with that transition. They helped make it easier. They have understood how difficult it has been, so that took some of the pressure off of us.

The majority of the students reported having highly effective teachers who were instrumental in preparing them for success in their college course work (at both EPCC and MECHS campuses) beginning in their freshman year and continuing to their current status as juniors.

The majority of the students indicated that the support of parents/family was equally important for their successful pursuit of the MECHS program, as was their teacher's support. Research has shown that parental involvement has a positive impact on the academic success of a student (Tierney, 2002; Zalaquett, 2005). One student participant reported the willingness of their parents to support her success:

My parents are willing to pick me up and wait when I have to stay after class because I have questions at the high school or for science lab work at the college. They make themselves more flexible so I can get all I need out of each class.

Research Question Three Themes

What are students' perceptions of how Mission Early College High School is demonstrating effective instructional practices?

Highly qualified teachers. When asked about the effective instructional practices in terms of their teacher's ability to instruct, all of the student participants noted that they felt their teachers were highly qualified and effective in their teaching methods. Teachers were observed to be dedicated individuals who were truly interested in enabling their students to succeed: "They are willing to give up their lunchtime for tutoring. It shows you that they want us to do our best and graduate with our college degree and our diploma." Several students conveyed their enthusiasm and gratefulness for their teachers, such as one particular student's observation:

They have a love and a passion for what they do. They became friends with us. They are not just teachers or instructors, they become friends with you. You can open up to them. You become comfortable telling them anything. You see them as also going through this process at Mission. They are going through the same new experience with us. It helps us and I'm grateful for that.

The majority of students reported how unique the program at MECHS was to the public at large. There was a clear realization that they should take advantage of the opportunity to be exposed to the teaching methods employed by MECHS teachers. One student participant related information concerning a former student who expressed her dismay at not feeling challenged by her schoolwork and teachers after moving to another city:

I have a friend who had to move. She had to go back to a traditional school setting. Every time I talk to her, she is very bored with her traditional high school. She doesn't feel she is being taught anything by her teachers. She misses the rigor...the freedom we are given here at Mission to explore new avenues through our teachers.

A majority of student participants discussed what it meant to know their teachers are required to have a master's degree to teach at MECHS:

A lot of our teachers are continuing their education – beyond their master's or earning another master's. These teachers want to learn more so they can help us with what they teach us. They try to be the best in their field so they can help us do better as students.

Technology. The students of today are known as Generation Y which identifies individuals born approximately between 1977 and 1997. This is the first generation that has no real memory of life without computers, cell phones, and digital music (Rockler-Gladen, 2006). School without technology would be a bizarre concept to any current high school student, as one student participant discussed: “Technology is everywhere – of course we use it here. The best thing is the laptop given to each student. We can use it in our classrooms to type our notes and work on our projects whenever we want.”

Another student participant praised the laptops: “The laptops have really helped us stay organized because most of our work is required to be typed.”

All of the student participants reported their classes are saturated with digital technologies and multimedia applications such as Power Point and Smart Boards (interactive whiteboards) as teaching tools. One student participant explained the use of streaming media at MECHS: “We use multimedia every morning at Mission. We use streaming for morning announcements before classes begin.”

One student participant reported her high satisfaction with the use of technology as a mandatory teaching and learning tool:

We have a lot of technology and we are encouraged to use it. For example, in one class, we each chose from many different topics and presented them through videos. I did it like a radio show and I had a lot of fun doing that!

Another student felt the full potential of the available technology was not being utilized by either the students or the teachers. An explanation was offered by the student to explain her sentiment:

The teachers need a lot of training and practice with some of this software that is so advanced. If they're not given the time to learn it they're not going to be able to teach (the students). I think they should have time to explore these extra things to bring them into our lessons. We really need to use everything that is made available to us or this advanced technology just a waste of space...and money!

The same student with the concern for the lack of full utilization of available technology commented on the school's website and specifically the teachers' web pages:

There is too much inconsistency in the design of their web pages. It is hard to look through all of their different styles when I'm trying to find syllabus

information like test dates and homework. It wastes a lot of my time. My parents have also complained about how hard it is for them to read through all of them. I told them I agreed it needed to be more user-friendly.

Research Question Four Theme

What are students' perceptions of how Mission Early College High School is engaging students, parents, community, business, and public agencies in developing and sustaining the school?

Engaging parents and community. Research states that parent involvement leads to better school attendance, reduced dropout rates, and better achievement regardless of the students' family income level, racial, or cultural background (Inger, 1992). As one student participant stated, "There are many parents that are involved. They do PTA or work with the parent liaison. There are also really good turnouts at parent-teacher conferences. I didn't see many parents ever show up for conferences at my other school." Another student reported the numerous invitations for parents to attend school activities:

We give presentations for research papers and our teachers invite our parents. Parents are encouraged to attend when we have competitions with other schools. I like Parent Night and the awards ceremony at the end of the year when all of the parents can meet up and speak with our teachers and (MECHS Principal).

One student perceived MECHS efforts lacking in promoting parent involvement.

The student reported more could and should be done to include parents/family:

They could do a lot more here if (parents) were invited to volunteer. I don't think the school tries hard enough to do that. My parents both work so they wouldn't be able to do it, but I know my friends have parents who would love to be up here more.

Half of the student participants discussed the availability of school information via the school website and newsletter for the community:

I know my neighbors have asked my parents about Mission and my dad told them to check out our website. There are links for parents to read about what we're all about. They have little kids and they are interested in giving them this kind of education after talking to my dad and reading the website information.

Students did not address issues involving business, public agencies or the broader community during interviews.

Conclusion

Chapter Four focused on a description of the results of the research techniques employed to gather data regarding Mission Early College High School. The sources of data were obtained from classroom observations, a focus group interview with MECHS teachers and individual interviews with junior students. A profile of MECHS was also developed to provide information relevant to the operation of the school. The following chapter presents an interpretation of the research findings.

CHAPTER FIVE: ANALYSIS AND INTERPRETATION OF THE RESEARCH RESULTS

Introduction

This research project was designed to gain insight into the effectiveness of the Mission Early College High School (MECHS) in its third year of operation. The research was conducted at the point in its development when MECHS had not graduated its first class of students and was still in the relatively early operational phases of the first early college high school in the El Paso region.

As stated previously, the purpose of the study was to provide a formative assessment of MECHS and to assist its administrators in determining if they were meeting the needs of the students. Based in part on the study, the school district and partnering community college might choose to modify some aspects of their operations in order to enhance the quality and effectiveness of the education provided to the students.

To accomplish this purpose, the study was designed to gather relevant data from several sources. The primary source consisted of junior students who comprised the MECHS inaugural freshman class in 2006-2007. Secondary data sources included classroom observations, responses from teachers, and statistics about the operation of the school. The results and findings from the research were reported in Chapter Four.

This chapter presents an analysis and interpretation of the research. The first section, which provides insights gained from the secondary sources, is followed by an analysis of the students' perceptions of MECHS. The student data are organized and

presented as responses to the four research questions. Chapter Five concludes with implications for further study and the conclusion.

Secondary Data Sources

In preparation for conducting the individual student interviews, the researcher gained knowledge about MECHS by observing two classes and holding a focus group interview session with three teachers. Each of the secondary data sources is discussed in this section.

Classroom Observations

As described in Chapter Four, the researcher engaged in a formal observation of two junior courses, one in English Literature and one in physics. The goal of the observations was to systematically examine the classroom learning environment experiences by MECHS junior students and evaluate the instructional techniques employed by the teachers. With regard to the learning environment and instructional methods, the researcher concluded that the teachers were demonstrating practices consistent with research on successful classroom practices. Examples from the observations included flexible classroom organization; various forms of interaction between and among the teachers and students; active inclusion of all students; and efforts to relate the instruction to real life situations.

Teacher Participant Themes

The three themes that emerged from the teacher focus group interview involving MECHS effectiveness were school leadership, school design (i.e., location and size), and student/family support.

School leadership has been cited in research as a strong determinant of school effectiveness. Although it is teacher performance that directly affects student performance, quality of leadership matters in determining the motivation of teachers and the quality of their teaching (Evans, 1999; Sergiovanni, 2001; Cheng, 2001). The teacher responses included mention of a clear, shared vision at MECHS, and how it is consistently communicated by administrators to the rest of the school's stakeholders. The teacher perception of school leadership was overwhelmingly positive. The frequent references of praise for the principal hold promise for continued progress at MECHS. If the teachers hold the principal in high regard, their willingness to work as a team is increased. This teamwork will result in direct benefit to the students as the teachers' performance is sustained by their effort to meet the expectations set forth by the principal.

The design of the location of the school was reported as a contributing factor to MECHS effectiveness by all of the teacher participants. Because students in the ECHS target population might not see themselves as college material, it is important to deliberately foster a college-going culture. Establishing MECHS on a college campus helps to create an environment in which college is a natural and articulated part of the

vision for students' futures. A teacher discussion concerning the proximity of MECHS to EPCC facilities centered on the ease of student access to higher education. Easy access includes the freedom of students to explore and utilize higher education resources and increases the possibility of high frequency of use. Access and frequency have been widely referred to as barriers contributing to student success in higher education.

The teachers' discussion of school size as related to facility challenges is a common complaint for those involved with ECHS programs. In an American Institutes for Research (AIR) and SRI International study where over 20 ECHS site visits were conducted, about one-quarter of the 20 schools in the sample reported facilities challenges (AIR & SRI International, 2008). Common complaints included lack of science labs that meet district criteria, windowless and cramped classrooms, and assignments to district-owned portables. At MECHS, teachers discussed these complaints not in an overwhelmingly negative fashion, but more so as an accepted "growing pain" in light of the school's young age.

The teacher findings included the discussion for the need of a social worker at MECHS. This issue is related to student/family support. Instead of increasing the duties of the current counselor, a social worker may work at another high school, sharing equal part-time hours at MECHS. The current counselor may feel overwhelmed with the addition of social-worker-type-duties and become ineffective in his or her ability to properly offer counselor services. The fact that a teacher recognized that counselor career tutoring or an academic support class was not enough to ensure students' success

showed an understanding that some combination of academic and social–emotional supports was needed to fully support the students. Among the ECHS programs in AIR/SRI International’s 2006–07 site visit sample, 35% offered a comprehensive set of academic and social–emotional supports that included formalized offerings and informal supports (AIR, SRI International, 2008).

Before moving to the next section, it is noted the supporting data analysis from the classroom observations and the teacher focus group contributed to the following discussion focused on the student participants. The relevance of the secondary data findings was applied to each of the four research questions to enhance the student participant findings.

Primary Data Source: Student Participants

The four research questions were designed to explore student perceptions concerning MECHS effectiveness in promoting and facilitating student success. As noted in Chapter Three, the questions were derived from the Early College High School Initiative’s (ECHSI) benchmarks of effectiveness (see p. 42). Each of the four research questions are addressed sequentially in this section.

Research Question One

What are students’ perceptions of how Mission Early College High School is preparing them for both high school graduation and completion of up to two years of college credit?

It was evident from the students' responses to this question that they believed success was attainable and that MECHS had established the enabling conditions necessary to prepare students for success. The fact that students reported feeling good about themselves demonstrates an advanced level of self-esteem required to meet the high expectations of the program. The researcher concluded this culture of optimism and confidence was influenced by the nurturing family environment in place at MECHS. This "can do" attitude of the students showed the influence of strong school leadership and teacher contributions in making higher education at the Associate, Bachelor and Master's level a realistic goal for the students.

The students demonstrated an increased level of understanding of the behavior expected of college students. The result of the awareness was demonstrated in the interest and engagement the students displayed toward the instructional program at MECHS. It was evident from student interviews that they aspired to meet the behavior expectations set forth by MECHS leadership and teachers. The students displayed a keen sense of professionalism and work ethic during interviews with the researcher. Body language, eye contact, and advanced interpersonal skills reflected careful study of social skills.

Research Question Two

What are students' perceptions of how Mission Early College High School is providing comprehensive student supports based on their academic and social needs?

Students reported that their teachers strived to form close interpersonal relationships with them beginning when they entered as MECHS freshman. The teachers' behavior personalized the MECHS program experience for the students. The focus on personalization translated into academic achievement based on the premise that caring relationships increase students' level of effort and motivation to succeed. The focus on fostering a supportive relationship with students created a feeling of safety within the school environment. The school placed an emphasis on building strong relationships to create a sense of family that was acknowledged and appreciated by the student participants. This emphasis on strong relationships also helped students' perceptions that they had the support needed to achieve and succeed with higher-level work.

Research Question Three

What are students' perceptions of how Mission Early College High School is demonstrating effective instructional practices?

The students reported their teachers were dedicated and truly interested in their success. This translated into the student perception that their teachers were highly qualified. The students shared how enthusiastic and caring their teachers were both inside and outside the classroom. Students felt their teachers were genuinely interested in providing an overall, comprehensive learning experience. Thus, students equated their teachers to be "highly qualified" not only because they possessed a Master's but also

because they were dedicated to their profession. An effective teacher's enthusiasm for his or her subject and a genuine interest in the students are found to improve student achievement (Kyriacou, 1986). It is important for students to know that teachers are personally invested in their success. One of the most important characteristics students look for in a teacher is caring.

Outside of the classroom, students reported their education was enriched by using technology including the wireless computer networks on the MECHS campus, EPCC libraries, and EPCC computer labs. However, there was a student perception that technology was in fact underutilized in MECHS classrooms. Educators need to be knowledgeable about the effective uses of technology in order to succeed with its integration into the learning process. McKamey (2008) maintains that successful integration of technology requires effective uses of learning theories and content-specific approaches to curriculum development.

The challenges of successfully integrating multimedia technology in a classroom are not uncommon. Institutions must provide the resources and support necessary to enable faculty members to adapt to the changing learning and scholarly paradigms of the digital age. These resources include robust technology environments, staff support, and training opportunities (Duderstadt, Atkins, & Van Houweling, 2002). Without the proper support after implementation, faculty cannot be successful with the new tools (Strauss, 2002). Professional development for MECHS teachers would offer the assistance necessary to enable full utilization of the available technology within their classrooms. A

technology consultant would provide a more personalized educational experience for teachers in small groups or one-on-one sessions. The teachers would then be able to better utilize technology in the classroom for the benefit of their students.

Research Question Four

What are students' perceptions of how Mission Early College High School is engaging students, parents, community, business, and public agencies in developing and sustaining the school?

The students discussed the issue of parent involvement in various MECHS activities. School invitations were mentioned as ways of offering opportunities and encouragement for parents to become more engaged with the school. The act of volunteering as a form of parent involvement at the school was also mentioned. Offering a range of possibilities for parent involvement is one way to reach out to parents.

One student perceived the school's efforts to be lacking in regard to parent involvement. A report published by the United States Department of Education (1991) discusses the need to involve parents in their children's education as well as the challenges of initiating and sustaining parent involvement. Only one of every ten schools has found effective ways to engage parents in policy and decision-making (Davies, 1996). There is a need to inform schools about strategies to encourage parents to become involved in their child's school. Unfortunately, there is a lack of research that explores multiple methods of parent engagement (Moore, 1991). If a lack of parent involvement

becomes an issue at a school, administrators need to consider alternate engagement practices.

Increased efforts to involve parents, community, business and public agencies in developing and sustaining the school would benefit most schools. During the period of this research study, the efforts for engagement at MECHS appeared to be focused almost entirely on students. While this reality was understandable at this point in the schools brief history, the remaining stakeholders need to be engaged proactively to plan for sustainability concerns. It is likely that expanded parent involvement would offer a plethora of school effectiveness enhancements. The “family” mentality apparent at MECHS would be strengthened if the immediate families of students were recognized as an enriching component to school effectiveness.

The multiple contributing benefits of community, business, and public agency engagement are essential to the sustainability of MECHS. These stakeholders might provide monetary support and offer students mentoring/internship opportunities through contract agreements facilitated by MECHS and EPCC leadership. Administrators of both schools would be prudent to explore such options within their community.

Implications for Further Study

Early college high schools are relatively new to the educational scene, are focused on the educational needs of traditionally underrepresented students, are based on accelerated academic programs, and involve close collaboration between school districts

and institutions of higher education. For these reasons and more, ECHS are increasingly the focus of and are attractive to educational researchers.

As reflected in this study, an important area of research is centered on the effectiveness of the schools in providing quality educational opportunities for low SES students, many of whom are minorities and English language learners. Expansion and extension of students in this arena are recommended.

Other topics which merit consideration for research include:

- the structure and organization of relationships between the school districts and institutions of higher education that collaborate to create ECHS.
- the impact of dual credit and concurrent enrollment courses on social/emotional development of students who are engaged in ECHS accelerated programs.
- the efforts to involve parents, businesses, community organizations, and citizen support of efforts to educate underrepresented students in programs like ECHS.

Conclusion

The emergence of early college high schools (ECHS) in American education is the result of two significant forces. The first is the P-16 concept of education which emphasizes the importance of expanding the working relationships between public schools and institutions of higher education. The other force is the profound need to improve the educational outcomes for students traditionally underrepresented in postsecondary education including individuals who are minorities, individuals from lower income families, and/or English language learners.

Consistent with the P-16 concept, a promising innovation that has developed within the last decade to address the educational needs of underrepresented students is the creation of ECHS programs. These schools involve a formal collaboration between a public school district and, typically, a community college in order to create a special purpose high school. The ECHS is organized with an accelerated academic program which enables underrepresented students the opportunity to simultaneously earn a high school diploma and an Associate's degree in as few as four years.

The research project reported in this study focused on a single ECHS located in El Paso, Texas which was in its third year of operation. Mission Early College High School was the first of its kind in the region and was created based on a collaborative effort between El Paso Community College and the Socorro Independent School District. This research study was designed to gain insight into the effectiveness of MECHS and constituted a partial formative evaluation of the school based primarily on the perceptions of some of its students. The students interviewed for the project were in their junior year and were members of the inaugural MECHS class in 2006-2007.

Based on the research protocol, the researcher identified several themes which were derived from the interviews with thirteen MECHS students. The themes as described and discussed in the study are:

- 1) Success is Attainable
- 2) Student Roles and Responsibilities
- 3) Personalization
- 4) Support to Achieve Higher Level Work

- 5) Highly Qualified Teachers
- 6) Technology
- 7) Engaging Parents

With recognition of the various limitations inherent in qualitative research and case study methodology, the researcher reached several conclusions which are summarized here and constitute a partial formative evaluation of MECHS. The comments are based on the researcher's interpretations of the student responses and are summarized briefly in three categories: On the Students Themselves; About the Teachers; and Regarding the School as an Organization.

On the Students Themselves:

- Believe they can be successful
- Aware of their responsibility to take their work seriously and behave appropriately
- Recognize they are receiving personalized and individualized attention

About the Teachers:

- Are well qualified
- Are concerned about each student and recognize the student's individuality
- Need to use technology more effectively

Regarding the School as an Organization:

- Positive and supportive school culture
- Strong and able leadership
- Need to engage parents more effectively
- Need to expand and enhance facilities

- Need to increase student/family support with additional social work services

Early college high schools are projected to continue to grow throughout the United States. Their rapid expansion justifies continuing research relative to progress in their ability to address college access, persistence and completion rates for underrepresented students. It is imperative to evaluate elements of the unique higher educational partnership an ECHS program enjoys. This is due in part to the numerous barriers that exist between traditional high schools and higher education. The disconnection between high school and higher education is a considerable barrier to the college aspirations of underrepresented students.

The ECHS program speaks to the commanding presence of the P-16 concept of education and its efforts to address the educational challenges of this nation. The secondary to postsecondary transition is addressed in the ECHS design and offers insight into how the program aspires to overcome the vulnerability of this historical disconnection. The road is lengthy and perilous, yet provides the promise of considerable progress for higher education success.

APPENDIX A

STUDENT PARTICIPANT INTERVIEW QUESTIONS

1. What, if any, observations have you made concerning how the MECHS mission is modeled on a daily basis by parents/guardians, high school and college instructors and community members?
2. How do you feel your performance has improved as a student during the past three years, why or why not?
3. Do you feel there is adequate classroom space and facilities to meet your needs as a learner?
4. How do you believe you and your classmates are reflective of the ECHS targeted population (who are defined as low-income young people, first-generation college goers, English language learners, and/or students of color)?
5. How do you feel agreeing with the statement that you have highly qualified high school and college instructors?
6. What do you feel your school has provided you and your family for the support you need while attending Mission Early College High School?
7. What do you feel your high school and college instructors know about your personal strengths, challenges and goals?
8. How do you receive support from your school to achieve higher-level work in your studies?
9. How do you or your classmates mentor entering students and/or speak to parents/families of potential students about the significance of Mission Early College High School?
10. How knowledgeable do you see yourself and/or your high school classmates of the roles and responsibilities of being a college student, such as meeting behavior and work expectations?
11. How do you know/feel you are heard by your school's administration when it concerns issues such as student organizations, presentations, mentoring and/or advising?
12. How have you received help from the college career center to develop your post-graduation plans?

13. How do you feel you, your classmates, and your instructors use the available technology at Mission Early College High School to help increase learning?
14. How do you feel a close connection is made with the projects and activities in your schoolwork to your personal life?
15. How do you feel the culture of Mission Early College High School is reflective of the school vision and school mission?
16. How do you feel Mission Early College High School includes your parents/guardians/families by offering opportunities to become involved with school activities/functions?

APPENDIX B

TEACHER PARTICIPANT INTERVIEW QUESTIONS

1. What, if any, observations have you made concerning how the MECHS mission is modeled on a daily basis; how is the school meeting it and what can be done to improve meeting its mission?
2. How do you feel student performance has improved during your time here at MECHS - why or why not?
3. Do you feel there is adequate classroom space and facilities to meet your needs as an instructor – why or why not?
4. What do you feel the school has provided for the support the students and families of students need while attending Mission Early College High School?
5. How do you provide support to your students to achieve higher-level work in their studies?
6. What do you feel you know about your student's personal strengths, challenges and goals?
7. How do you work to ensure a close connection is made for the students with projects and activities to their personal life?
8. How knowledgeable do you see your students of the roles and responsibilities of being a college student, such as meeting behavior expectations and work expectations?
9. How do you feel your use of the available technology at Mission Early College High School helps increase learning?
10. How do you feel the culture of Mission Early College High School is reflective of the school vision and school mission?

APPENDIX C



OFFICE OF RESEARCH SUPPORT

THE UNIVERSITY OF TEXAS AT AUSTIN

*P.O. Box 7426, Austin, Texas 78713 (512) 471-8871 -FAX (512) 471-8873
North Office Building A, Suite 5.200 (Mail code A3200)*

FWA # 00002030

Date:

PI(s):

Department & Mail Code:

Title:

IRB APPROVAL – IRB Protocol #

Dear:

In accordance with Federal Regulations for review of research protocols, the Institutional Review Board has reviewed the above referenced protocol and found that it met approval under an Expedited category for the following period of time:

Expedited category of approval:

(1) Clinical studies of drugs and medical devices only when condition (a) or (b) is met. (a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review). (b) Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

(2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows: (a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or (b) from other adults and children², considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.

(3) Prospective collection of biological specimens for research purposes by Non-invasive means.
Examples:

- (a) hair and nail clippings in a non-disfiguring manner;
- (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction;
- (c) permanent teeth if routine patient care indicates a need for extraction;
- (d) excreta and external secretions (including sweat);
- (e) uncannulated saliva collected either in an un-stimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue;
- (f) placenta removed at delivery;
- (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor;

- (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the Process is accomplished in accordance with accepted prophylactic techniques;
- (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings;
- (j) sputum collected after saline mist nebulization.

(4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications). Examples:

- (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy;
- (b) weighing or testing sensory acuity;
- (c) magnetic resonance imaging;
- (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography;
- (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(4). This listing refers only to research that is not exempt).

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt).

Please use the attached approved informed consent

You have been granted Waiver of Documentation of Consent

According to 45 CFR 46.117, an IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either:

- The research presents no more than minimal risk
AND
- The research involves procedures that do not require written consent when performed outside of a research setting
<OR>
- The principal risks are those associated with a breach of confidentiality concerning the subject's participation in the research
AND
- The consent document is the only record linking the subject with the research
AND
- This study is not FDA regulated (45 CFR 46.117)
AND
- Each participant will be asked whether the participant wishes documentation linking the participant with the research, and the participants wishes will govern.

You have been granted Waiver of Informed Consent

According to 45 CFR 46.116(d), an IRB may waive or alter some or all of the requirements for Informed consent if:

- The research presents no more than minimal risk to subjects;
- The waiver will not adversely affect the rights and welfare of subjects;

- The research could not practicably be carried out without the waiver; and
- Whenever appropriate, the subjects will be provided with additional pertinent information they have participated in the study.
- This study is not FDA regulated (45 CFR 46.117)

RESPONSIBILITIES OF PRINCIPAL INVESTIGATOR FOR ONGOING PROTOCOLS:

- (1) Report **immediately** to the IRB any unanticipated problems.
- (2) Proposed changes in approved research during the period for which IRB approval cannot be initiated without IRB review and approval, except when necessary to eliminate apparent immediate hazards to the participant. Changes in approved research initiated without IRB review and approval initiated to eliminate apparent immediate hazards to the participant must be promptly reported to the IRB, and reviewed under the unanticipated problems policy to determine whether the change was consistent with ensuring the participants continued welfare.
- (3) Report any significant findings that become known in the course of the research that might affect the willingness of subjects to continue to take part.
- (4) Insure that only persons formally approved by the IRB enroll subjects.
- (5) Use **only** a currently approved consent form (remember approval periods are for 12 months or less).
- (6) **Protect the confidentiality of all persons and personally identifiable data, and train your staff and collaborators on policies and procedures for ensuring the privacy and confidentiality of participants and information.**
- (7) Submit for review and approval by the IRB all modifications to the protocol or consent form(s) prior to the implementation of the change.
- (8) Submit a **Continuing Review Report** for continuing review by the IRB. Federal regulations require **IRB review of on-going projects no less than once a year** (a Continuing Review Report form and a reminder letter will be sent to you 2 months before your expiration date). Please note however, that if you do not receive a reminder from this office about your upcoming continuing review, it is the primary responsibility of the PI not to exceed the expiration date in collection of any information. Finally, it is the responsibility of the PI to submit the Continuing Review Report before the expiration period.
- (9) Notify the IRB when the study has been completed and complete the Final Report Form.
- (10) Please help us help you by including the above protocol number on all future correspondence relating to this protocol.

Sincerely,



Jody L. Jensen, Ph.D.
Professor
Chair, Institutional Review Board

APPENDIX D

PARENT CONSENT FORM WITH CHILD ASSENT

Title: **The Role of Early College High School in P-16 Success: A Case Study of Students' Perceptions of Mission Early College High School Effectiveness**

Conducted By: Melinda Valdez, of The University of Texas at Austin, Educational Administration/CCLP

Telephone: (832)423-XXXX, Email: XXXX@mail.utexas.edu

Faculty Sponsor: Edwin R. Sharpe, Telephone: (512)475-8577

Email: esharpe@mail.utexas.edu

Funding Source: Melinda Valdez

Your child is being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

The purpose of this study is to focus on one specific ECHS while in its third year of operation to assess its operational effectiveness from the perspective of junior-level students.

If you agree to be in this study, we will ask your child to do the following things:

- Participate in an interview with the researcher.

Total estimated time to participate in this study is approximately one hour.

Risks of being in the study:

- The risk associated with this study is no greater than everyday life.

Benefits of being in the study:

- There are no benefits for participation in this study.

Compensation:

- You and your child will not be compensated, monetary or otherwise, for participating in this study.

Confidentiality and Privacy Protections:

- Interviews will be audio taped
- Audio tapes will be coded so that no personally identifying information is visible on them
- Audio tapes will be kept in a secure place (e.g., a locked file cabinet in the investigator's office)
- Audio tapes will be heard only for research purposes by the investigator and his or her associates
- Audio tapes will be erased after they are transcribed or coded
- The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions:

If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support at (512) 471-8871 or email: orssc@uts.cc.utexas.edu.

You are making a decision about allowing your (son/daughter) to participate in this study. Your signature below indicates that you have read the information provided above and have decided to allow him or her to participate in the study. If you later decide that you wish to withdraw your permission for your (son/daughter) to participate in the study, simply tell me. You may discontinue his or her participation at any time.

Printed Name of (son/daughter)

Signature of Parent(s) or Legal Guardian

Date

Signature of Person Obtaining Consent

Date

“I have read the description of the study that is printed above, and I understand what the procedures are and what will happen to me in the study. I have received permission from my parent(s) to participate in the study, and I agree to participate in it. I know that I can quit the study at any time.”

Signature of Child

Date

Signature of Investigator: _____

Date: _____

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

APPENDIX E

ADULT CONSENT FORM

Title: **The Role of Early College High School in P-16 Success: A Case Study of Students' Perceptions of Mission Early College High School Effectiveness**

Conducted By: Melinda Valdez, of The University of Texas at Austin, Educational Administration/CCLP

Telephone: (832)423-XXXX, Email: XXXX@mail.utexas.edu

Faculty Sponsor: Edwin R. Sharpe, Telephone: (512)475-8577, Email: esharpe@mail.utexas.edu

Funding Source: Melinda Valdez

You are being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

The purpose of this study is to focus on one specific ECHS while in its third year of operation to assess its operational effectiveness from the perspective of junior-level students and current teachers at MECHS.

If you agree to be in this study, we will ask your child to do the following things:

- Participate in an teacher focus group interview with the researcher
-

Total estimated time to participate in study is approximately one to two hours.

Risks of being in the study:

- The risk associated with this study is no greater than everyday life.

Benefits of being in the study:

- There are no benefits for participation in this study

Compensation:

- You will not be compensated, monetary or otherwise, for participating in this study.

Confidentiality and Privacy Protections:

- Interviews will be audio taped
- Audio tapes will be coded so that no personally identifying information is visible on them
- Audio tapes will be kept in a secure place (e.g., a locked file cabinet in the investigator's office)
- Audio tapes will be heard only for research purposes by the investigator and his or her associates
- Audio tapes will be erased after they are transcribed or coded
- The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions:

If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Jody Jensen, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects at (512) 232-2685 or the Office of Research Support at (512) 471-8871 or email: orssc@uts.cc.utexas.edu.

REFERENCES

- Al-Bataineh, A., & Brooks, L. (2003). Challenges, advantages, and disadvantages of instructional technology in the community college classroom. *Community College Journal of Research and Practice*, 27(6), 473-484.
- American Community Surveys. (2004). Demographic and economic characteristics. Retrieved July 7, 2008 from http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=&_lang=en&_ts=
- American Institutes for Research. (2005). *Reassessing international mathematics performance: new findings from the 2003 TIMMS and PISA*. Washington, D.C.: AIR.
- American Institutes for Research & SRI International. (2008). *2003-2007 Early College High School Initiative Evaluation*. Retrieved May 7, 2009 from http://www.gatesfoundation.org/learning/Documents/ECHSI_Evaluation_2003-07.pdf
- Bachor, B. (2000). *Reformatting reporting methods for case studies*. Retrieved October 3, 2008 from <http://www.aare.edu.au/00pap/bac00287.htm>
- Bartolome, L. (1994). Beyond the methods fetish: Towards a humanizing pedagogy. *Harvard Educational Review*: 173-194.
- Barton, P. E. (2003). *Parsing the Achievement Gap: Baselines for Tracking Progress*. Princeton, NJ: Policy Information Report for Educational Testing Service.
- Betheil, G. (2008). *Career and Technical Education as Part of Your Multiple Education Pathways: New York City Department of Education*. Presentation at the Multiple Education Pathways Learning Exchange, Arlington, Virginia.
- Bogdan, R., & Biklen, S (2003). *Qualitative research for education: An introduction to theories and methods*. Boston: Pearson Education.
- Bridgeland, J. M., DiIulio, Jr, J., & Morison, K.B. (2006). *The Silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises and Peter D. Hart Associates.

- Burkam, D. T., and Lee, V.E. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Washington, D.C.: Economic Policy Institute.
- Callan, P.M., Finney, J.E., Kirst, M.W., Usdan, M.D., and Venezia, A. (2005). *The governance divide: A report on a four-state study on improving college readiness and success*. San Jose: The National Center for Public Policy and Higher Education.
- Carnevale, A., & Desrochers, D. (2003). *Standards for what? The economic roots of K-16 reform*. Princeton, NJ: Education Testing Service. Retrieved January 18, 2008, from http://www.transitionmathproject.org/assets/docs/resources/standards_for_what.pdf.
- Cawelti, G. (1995). *Handbook of research on improving student achievement*. Arlington, VA. Educational Research Service.
- Chao, E.L. (2008, November). *U.S. Secretary of Labor remarks*. Presentation at the Multiple Education Pathways Learning Exchange, Arlington, Virginia.
- Cheng, Y.C. (2002). *Leadership and strategy*. London: Chapman
- Creswell, J. (1998). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage.
- Cunningham, A., Redmond, C. & Merisotis, J. (2003). *Investing early: Intervention programs in selected U.S. states*. Retrieved August 15, 2008 from <http://www.avidonline.org/info/download.asp?ID=433&tabID=0>
- Davies, D. (1996). The tenth school. *Principal*, 76 (2), 13-16.
- Davies, M. (2005). *Case study analysis and case method analysis*. Retrieved October 5, 2008 from <http://tlu.ecom.unimelb.edu.au/pdfs/crals/Lecture%205-Case%20Study%20Method.pdf>
- Duderstadt, J.J., Atkins, D.E., & Van Houweling, D. (2002). *Higher education in the digital age: Technology issues and strategies for American colleges and universities*. Westport, CT: American Council on Education/Praeger.
- Early College High School Initiative (2008). Why do we need early college high school? Retrieved August 2, 2008 from <http://www.earlycolleges.org/overview.html#basics1>

- Early College High School Initiative (2006, July). *Texas: Preconditions and processes to address early college high school policy issues*. Jobs for the Future: Boston, MA.
- Education Commission of the States (2003). Closing the college participation gap: A national summary. Retrieved July 9, 2007, from http://www.ecs.org/ecsmain.asp?page=/html/publications/home_publications.asp
- Education Trust (2001). *Achievement in America 2001*. Washington, D.C.
- El Paso Community College (2008). About EPCC. Retrieved May 25, 2008 from <http://www.epcc.edu/AboutEPCC/tabid/57/language/en-US/Default.aspx>
- Evans, L. (1999). *Managing to motivate: A guide for school leaders*. London: Cassell
- Fulton, M. (1996). The abcs of investing in student performance. Denver, CO.: Education Commission of the States.
- Gall, M. D., Borg, W. R. & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). New York: Longman Publishers USA.
- Gardner, J. N. (1996). Helping America's first-generation college students: A bottom-line list of institutions of higher learning must do. *About Campus*, Nov-Dec, 31-32. Retrieved October 30, 2007 from, <http://catalog.library.txstate.edu:80/record=b1596473a>
- Gardner, R., Sainato, D., Cooper, J., Heron, T., Heward, W., Eshelman, J. & Grossi, T. (1994). *Behavior analysis in education: Focus on measurably superior instruction*. Pacific Grove, CA: Brooks/Cole Publishing Company.
- Gay, L., & Airasian, P. (2003). *Educational research: Competencies for analysis and applications* (7th ed.). Upper Saddle: Pearson Education, Inc.
- Gleazer, E.,J. (2000). *The Community College: Values, Vision & Vitality*. Washington, D.C.: Community College Press.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.) New York: Addison Wesley Longman.
- Glick, M. (2006). *Teaching in the Early College High School Initiative*. Retrieved June 4, 2008 from <http://www.jff.org/Documents/TeachingECHS.pdf>

- Greene, J. P. (2003). *Public high school graduation and college readiness rates in the US*. New York, NY:Manhattan Institute for Policy Research.
- Guba, E.G., & Lincoln, Y.S. (1985). *Naturalistic inquiry*. Newbury Park, CA : Sage.
- Guthrie, L.F. (2002). *The magnificent eight: AVID best practices study*. Burlingame, CA:CREATE.
- Haycock, K., and Huang, S. (2001). Are today's high school graduates ready? *Thinking K-16* 5,1: 3-17.
- Heckman, L. (2008). Personal Conversation. Austin, Texas.
- Hodgkinson, H. (1985). All one system: Demographics of education, kindergarten through high school. Washington, D.C.: Institute for Educational Leadership
- Hoffman, N., Vargas, J., Venezia, A., & Miller, M. (2007). *Minding the gap: Why integrating high school with college makes sense and how to do it*. Cambridge, MA: Harvard Education Press.
- Hudson, L. (2008, September). *The National Center for Educational Statistics: Trends in Career and Technical Education*. Presentation for a Brown Bag Seminar for the Vocational and Adult Education Office of the U.S. Department of Education, Washington, DC.
- Inger, M. (1992). *Increasing the school involvement of Hispanic parents*. ERIC Clearinghouse on Urban Education. (ERIC Document Reproduction Service No. ED350380).
- Kirsch, I., Braun, H., Yamamoto, K., and Sum, A. (2007). America's perfect storm: Three forces changing our nation's future. Princeton: Educational Testing Service.
- Kyriacou, C. (1986). *Effective teaching in schools*. Oxford: Basil Blackwell Ltd.
- Levine, D. (1995). *Reinventing the workplace*. Washington, D.C.: Brookings Institution.
- Levy, F., and R. J. Murnane (2004). *The new division of labor: How computers are creating the next job market*. Princeton, NJ: Princeton University Press.
- Lezotte, L. (1991). *Correlates of effective schools: The first and second generation*. Okemos, MI: Effective School Products.

- Lieberman, J.E. (2004). The early college high school concept: Requisites for success. Retrieved August 1, 2008 from <http://www.earlycolleges.org/Downloads/ECHSConcept.pdf>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Manno, B. and Barry, J. (2001). When education philanthropy goes awry. Retrieved December 12, 2008 from http://www.edexcellence.net/detail/news.cfm?news_id=318&pubsubid=839#839
- Marcy, M. (2006). The lessons of early colleges. *Chronicle of Higher Education*, 52 (23), B16-B16.
- Maki, Peggy. (2004). *Assessing for learning*. Sterling, VA: American Association for Higher Education.
- McKamey, J.P. (2008). *Smart Classroom Technology: Instructional Effectiveness and Faculty and Student Satisfaction*. Retrieved from ProQuest Digital Dissertations. (AAT 3330962)
- McMillan, J., & Schumacher, S. (1997). *Research in education: A conceptual introduction* (4th ed.). New York, NY: Longman.
- Merriam, Sharan (2002). *Qualitative research in practice: Examples for discussion and analysis*, New York: Jossey-Bass.
- Middle College National Consortium. (2008). *About: Mission*. Retrieved August 21, 2008 from <http://www.mcnc.us/aboutus.htm>
- Miller, S.L. (2008). Personal Conversation. Washington, D.C.
- MECHS Principal. (2008, May). Personal Conversation. El Paso, Texas.
- Moore, E. (1991). Improving schools through parent involvement. *Principal*, 71 (1), 17-20.
- Mortenson, T. (2005). Chance for College by Age 19. Oskaloosa, Iowa: *Postsecondary Education Opportunity*.

- National Association of Manufacturers, Manufacturing Institute's Center for Workforce Success, and Deloitte Consulting. (2005). *2005 skills gap report: A survey of the American manufacturing workforce*. New York:Deloitte Development LLC. Retrieved January 28, 2008, from <http://www.nam.org/2005skillsgap>.
- National Center for Public Policy and Higher Education (2004). *The educational pipeline: Big investments, big return*. San Jose: The National Center for Public Policy and Higher Education.
- National College Access Program (2008). *National College Access Network: Best practices resource*. Retrieved on August 12, 2008 from <http://www.collegeaccess.org/NCAN/ItemPage.aspx?groupid=3025&id=3025>
- Norton, S., McRobbie, C.J., & Cooper, T.J. (2000). Exploring secondary mathematics teachers reasons for not using computers in their teaching: Five case studies. *Journal of Research on Computing in Education*, 33, 87-109.
- Patton, M. (2002). *Qualitative evaluation and research methods* (3rd ed.) Thousand Oaks, CA: Sage
- Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA:Sage
- Pennington, H. (2004). *Fast track to college: Increasing postsecondary success for all students*. Washington, DC: Center for American Progress and Institute for America's Future.
- Peter D. Hart Research Associates. (2005). *Rising to the challenge: Are high school graduates prepared for college and work? A study of recent high school graduates, college instructors and employers*. Retrieved January 14, 2008, from http://www.achieve.org/files/pollreport_0.pdf.
- Pew Hispanic Center (2008). *Hispanics and Education*. Retrieved September 7, 2008 from <http://pewhispanic.org/topics/?TopicID=4>
- Project Graduation USA. (2008). *How does Project Grad work?* Retrieved September 7, 2008 from <http://www.projectgrad.org/site/pp.asp?c=fuLTJeMUKrH&b=365977>
- Rhodes, R. (2008). *Make It Happen: Ensuring the College Readiness of High School Graduates*. Presentation to the American Association of Community Colleges, Philadelphia, PA.

- Rochford, J.A., O'Neill, A., Gelb, A., & Ross, K.J. (2005). *P-16: The Last Education Reform*. Stark Education Partnership. Retrieved on March 11, 2008 from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/28/00/f8.pdf
- Rockler-Gladen, Naomi. (2006). Generation Y students. Retrieved April 18, 2009, from http://collegeuniversity.suite101.com/article.cfm/generation_y
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage Publications.
- Ruppert, S.S. (2003). *Closing the participation gap: A national summary*. Denver, Co: Education Commission of the States Center for Community College Policy.
- Sammons, P., Hillman, J, & Mortimore, P. (1995). Key characteristics of effective schools: A review of school effectiveness research. London: Office for Standards in Education.
- Scriven, M. (1991). *Evaluation thesaurus*. 4th ed. Newbury Park, CA: Sage Publications.
- Sergiovanni, T.(2001). *Leadership: What's in it for schools?* London: Routledge Falmer.
- Socorro Independent School District. (2008). About us. Retrieved June 4, 2008, from http://www.sisd.net/index.php?option=com_content&task=view&id=38&Itemid=179
- Somerville, J., & Yi, Y. (2002). *Aligning K–12 and postsecondary expectations: State policy in transition*. Washington, DC: National Association of System Heads.
- Spence, D.S. (2007, January 4). A Road Map to College and Career Readiness. *Education Week*, 26, 59-61.
- Steinberg, A., & Almeida, C.A. (2008). *Raising Graduation Rates in an Era of High Standards*. Retrieved January 14, 2008 from <http://www.achieve.org/files/raisinggradrates.pdf>
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Techniques and procedures and developing grounded theory (2nd ed.)*. Thousand Oakes, CA:339 Sage.
- Strauss, H. (2002). The right train at the right station. *Educause Review*, 37(2), 30-36.

- Steinberg, A. & Allen, L. (2002). *From large to small: Strategies for personalizing the high school*. Boston: Jobs for the Future.
- Texas Data Center (2008). *Texas Population Data*. Retrieved August 28, 2008 from <http://txsdc.utsa.edu/tpepp/txpopest.php>
- Texas Education Agency (2009). *Optional Flexible School Day Program*. Retrieved May 19, 2009 from <http://ritter.tea.state.tx.us/school.finance/ofsdp/>.
- Texas Education Agency (2008). *AEIS Mission Early College High School Campus Performance*. Retrieved May 19, 2009, from <http://ritter.tea.state.tx.us/cgi/sas/broker>
- Texas Education Agency (2007). *Study on Dual Credit Programs in Texas*. Retrieved May 19, 2009, from http://ritter.tea.state.tx.us/comm/06dcp_report.pdf
- Texas Higher Education Coordination Board (2009). *Texas Administrative Code*. Retrieved May 4, 2009 from [http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=G&rl=Y](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=G&rl=Y)
- The College Board (2008). *Fast Facts about AP Exams*. Retrieved August 3, 2008 from <http://professionals.collegeboard.com/testing/ap/about>.
- The Rio Grande Council of Governments. (August, 2003). *El Paso County Community Planning Alliance Community Plan 2003-2004*. Retrieved June 14, 2008, from <http://www.riocog.org/RegionalSvcs/CommunityPlan.pdf>
- Tierney, W. (2002). Parents and families in precollege preparation: The lack of connection between research and practice. *Educational Policy*, 16 (4), 588-606.
- Toossi, M. (2002). "A Century of Change: The U.S. Labor Force, 1950-2050." *Monthly Labor Review*, May 2002, 125(5), pp. 15-28.
- United States Census Bureau. *State and County Quick Facts* (2008). Retrieved August, 22, 2008 from <http://quickfacts.census.gov/qfd/states/48000.html>
- United States Department of Education, Office of Postsecondary Education. (2008). *Gaining early awareness and readiness for undergraduate programs*. Retrieved on September 14, 2008 from <http://www.ed.gov/programs/gearup/index.html>

- Van de Water, G. & Rainwater, T. (2001). *What is P-16?* Retrieved January 14, 2008 from <http://www.ecs.org/clearinghouse/24/28/2428.htm>
- Vargas, J. (2008, September). *Jumpstart on college and careers: Dual Enrollment Research, policies, and effective practice*. Presentation at the American Youth Policy Forum, Capitol Hill, Washington, DC.
- Watt, K.M., Powell, C.A., & Mendiola, I.D. (2004). Implications of one comprehensive school reform model for secondary school students underrepresented in higher education. *Journal of Education for Students Placed at Risk*, 9(3), pp. 241-259.
- Wechsler, H. (2001). *Access to success in the urban high school: The middle college movement*. New York: Teachers College Press.
- Yin, R. (1989). *Case study research: Design and methods* (Rev.ed). Newbury Park, CA: Sage.
- Zalaquett, C. (2005). Study of successful Latina/o students. *Journal of Hispanic Higher Education*, 5(1)

VITA

Melinda Martin Valdez was born in Pennsylvania and lived throughout the United States during her father's military career. After her father's retirement, Melinda's family settled in central Texas where Melinda graduated from Canyon High School. Melinda received her Bachelor of Science in Psychology from Southwest Texas State University (currently known as Texas State University), Master of Science in Educational Administration from Texas A&M University-Corpus Christi, and Doctor of Education in Educational Administration from The University of Texas at Austin.

In 2001, Melinda began her professional career as an educator in Spring ISD in Houston, Texas. In 2004, Melinda continued her educational career with CCISD in Corpus Christi, Texas. During her time as a 2007-2009 graduate student at The University of Texas at Austin, she worked for several educational institutions in the Austin area, including the Texas Education Agency, Community College Survey of Student Engagement, Austin Community College, Texas Higher Education Coordinating Board, National Evaluation Systems/Pearson Education, and completed an internship with the Office of Vocational and Adult Education in the United States Department of Education in Washington, D.C.

Permanent Address: 4508 Eagles Landing Drive, Austin, Texas 78735

This dissertation was typed by the author.