

2013-01-01

# Academic and Social Adjustment of Students Transitioning from an Early College High School Program to an Institution of Higher Education

Catie Mccorrey-Andalis

University of Texas at El Paso, [cmandalis@utep.edu](mailto:cmandalis@utep.edu)

Follow this and additional works at: [https://digitalcommons.utep.edu/open\\_etd](https://digitalcommons.utep.edu/open_etd)



Part of the [Education Commons](#)

---

## Recommended Citation

Mccorrey-Andalis, Catie, "Academic and Social Adjustment of Students Transitioning from an Early College High School Program to an Institution of Higher Education" (2013). *Open Access Theses & Dissertations*. 1878.  
[https://digitalcommons.utep.edu/open\\_etd/1878](https://digitalcommons.utep.edu/open_etd/1878)

This is brought to you for free and open access by DigitalCommons@UTEP. It has been accepted for inclusion in Open Access Theses & Dissertations by an authorized administrator of DigitalCommons@UTEP. For more information, please contact [lweber@utep.edu](mailto:lweber@utep.edu).

ACADEMIC AND SOCIAL ADJUSTMENT OF STUDENTS TRANSITIONING  
FROM AN EARLY COLLEGE HIGH SCHOOL PROGRAM  
TO AN INSTITUTION OF HIGHER EDUCATION

Catherine McCorry-Andalis

Department of Educational Leadership and Foundations

APPROVED:

---

Rodolfo Rincones, Ph.D., Chair

---

Teresa Cortez, Ed.D

---

Penelope Espinoza, Ph.D.

---

Donna Ekal, Ph.D.

---

Benjamin C. Flores, Ph.D  
Dean of the Graduate School

© 2013

Catherine McCorry-Andalis

ALL RIGHTS RESERVED

Dedication

To

Amanda Marie Andalis

and

Meredith Catherine Andalis

Your love of learning, passion for life coupled with your sense of adventure and the goals you have each set for the future, motivate and inspire me to do my very best each and every day.

Thank you!

ACADEMIC AND SOCIAL ADJUSTMENT OF STUDENTS TRANSITIONING  
FROM AN EARLY COLLEGE HIGH SCHOOLS PROGRAM  
TO AN INSTITUTION OF HIGHER EDUCATION

By

CATHERINE MCCORY-ANDALIS, MA, MPA

DISSERTATION

Presented to the Faculty of the Graduate School of

The University of Texas at El Paso

In Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF EDUCATION

Department of Educational Leadership and Foundations

THE UNIVERSITY OF TEXAS AT EL PASO

May 2013

## **Acknowledgements**

It would not have been possible to write this dissertation without the help and support of the extraordinary kind people around me, only some of whom I mention here. First and foremost, I would like to thank my husband, Jose and my daughters, Amanda and Meredith for their unconditional love and support over the past several years as I pursued my dream. I am incredibly grateful for the sacrifices you made, the extra work you took on and your understanding when I was unable to be with you. Thank you!

To my parents and brothers who gave me their unequivocal support long before this particular journey began and rallied around me even more as I was writing this dissertation, encouraging me each step along the way, I thank you. The kind words, motivational talks and belief in my abilities made a tremendous difference in my overall outlook when it came to completing the requirements for this degree. I appreciate all that you have done for me.

My sincere gratitude for the completion of this dissertation goes to Dr. Rincones, my Advisor. Without your willingness to step in and help, the relentless support you showed me every step of the way and the patience you expressed as we sorted things out, I would not have achieved this milestone. I admire you greatly not only as a scholar but as a mentor and look forward to partnering with you on scholarly projects well into the future.

Special thanks to my committee, Dr. Espinoza, Dr. Ekal and Dr. Cortez for the vital role you played in supporting this study and the insight and expertise you gave regarding policy, practice and related research in the area of early entrance programs.

To Dr. Gary Edens who believed in my abilities and pushed me to go further than I ever thought I could, to conduct this research and ultimately provide the students of UTEP the very best resources and support no matter the zip code they were born into. I am sincerely grateful for your

understanding and support, motivation and patience over the years, particularly in the final stages of this journey.

To Dr. Kathy Curtis, Dr. Ben Flores, Dr. Junius Gonzales, Dr. Sandra Hubler, Dr. Harry Meeuwsen, Dr. Arturo Pacheco, Dr. Richard Padilla and Dr. Bill Robertson for believing in me and providing me the support, guidance and motivation along the way that enabled me to complete this dissertation. Words cannot express how grateful I am for your mentorship, partnership and friendship over the past many years. Thank you for everything!

To Dr. Sandra Aguirre-Covarrubias, Amber Archuleta, Dr. Andrew Pena and Gus Monzon, thank you for your tremendous support of me and my family during this time. I admire each of you immensely for the work that you do in higher education and am blessed to have you in my life.

Dr. Charlie Gibbens, Brenda Gibbens, Kristin Oberheide, Laura Ortega, Kim Peter and Louie Rodriguez, thank you for all that you have done to ensure that I reach this milestone. I don't think you know how much your kind words and tremendous support positively impacted and influenced my desire to complete this dissertation. Thank you.

Last but not least, none of this would have been possible without the support of the students, staff and faculty of The University of Texas at El Paso who I am blessed to work with each and every day. The dedication you all show to the institution and to this community is truly inspiring and I am grateful to be a part of such an amazing community that is dedicated to providing access and excellence to a 21<sup>st</sup> century student demographic!

## **Abstract**

Historically, minority and low-income populations have faced numerous challenges in achieving a higher education particularly students of Latino descent. Gandara and Contreras (2009) explain that Latinos are the fastest growing population in the United States and yet academically, they are further behind than any other ethnic group in the nation. However, as the nation continues to grapple with how best to educate its children, and programs such as early college high schools grow in popularity, a viable solution to closing the academic achievement gaps of minority students, it is more important than ever that there is an understanding of how these programs impact students' academic and social adjustment to a four-year institution. Although designed to reduce time to degree and remove significant financial barriers to obtaining a college degree, the question as to whether early college high schools are preparing students well enough for the eventual academic and social adjustment to a four-year institution is a relevant one.

This study examined the academic and social adjustment of students who participated in an early college high school and matriculated to a four-year, public, research institution after completing 60 hours of college coursework thus academically classified as juniors as compared to students who had attended a traditional high school, matriculated to the four-year, public institution as freshman and at the time of the study were classified as juniors.



## Table of Contents

Acknowledgements.....	v
Abstract.....	vii
Table of Contents.....	viii
List of Tables.....	x
Chapter 1: Introduction.....	1
Statement of the Problem.....	5
Purpose of the Study.....	8
Significance of the Study.....	9
Chapter 2: Literature Review.....	11
Purpose of Higher Education.....	12
Evolution of Early College High Schools.....	14
Ethnic Isolation amongst Mexican American Students.....	16
The Texas Education System and its Impact on Low-income Students.....	18
Academic Achievement among Latinos.....	21
Community Impact on Student Academic Success.....	25
College Early Entrance Programs and Student Development .....	29
Campus Engagement and Student Development.....	41
Identity Development among Young Adults.....	47
Chapter 3: Methodology.....	51
Research Design.....	51
Survey Research.....	53
Participants.....	54
Survey Design.....	55
Instrument.....	60

Data Collection and Analysis.....	62
Analysis of Data.....	64
Limitations of Study.....	68
Chapter 4: Findings and Discussion.....	66
Demographics of Participants.....	69
Academic Adjustment to the Institution .....	74
Social Adjustment to the Institution.....	80
Chapter 5: Conclusions and Recommendations.....	87
Conclusions.....	87
Recommendations.....	88
Regarding Policy.....	89
Regarding Practice.....	90
Regarding Research.....	91
References.....	93
Appendix A: Institutional IRB Approval.....	101
Appendix B: Survey Instrument.....	103
Appendix C: High Schools Represented by Junior Sample.....	126
Appendix D: Respondents Majors Categorized by College/School.....	127
Curriculum Vita .....	128

## **List of Tables**

Table 4.1: Demographic Profile.....	
72	
Table 4.2: Academic Adjustment from High School to College.....	76
Table 4.3: Academic Adjustment at Four-Year, Public Institution .....	79
Table 4.4: T-test Results for Academic Adjustment during	
First Full Semester at Institution.....	80
Table 4.5: Social Adjustment High School/College.....	83
Table 4.6: T-test Results for Social Adjustment during	
First Full Semester at Institution.....	86

## **Chapter 1: Introduction**

Historically, minority and low-income populations have faced numerous challenges in achieving a higher education particularly students of Latino descent. Gandara and Contreras (2009) explain that Latinos are the fastest growing population in the United States and yet academically, they are further behind than any other ethnic group in the nation. Despite these statistics, research shows that Latinos value education immensely and that parents have high aspirations that their children will not only attend college but graduate (Goldenberg, Gallimore, Reese & Garnier, 2001). It is also widely recognized amongst the Latino population that a formal education would also mean advancement in the workforce and increased income. Pennington (2004) states that income and education are linked much more closely today than ever before with college graduates earning upwards of 70 percent more than high school graduates. Furthermore, Pennington (2004) found that of Hispanic students between 25 and 29 years of age, only 9% have earned a Bachelor degree compared to 34% of Caucasian students. In addition, only 20% of students with a family income of less than \$25,000 completed an Associate degree or higher compared with 45% of students whose family income ranged between \$25,000 and \$75,000 and 76% of students whose family income was more than \$75,000 (Pennington, 2004). The research in this area is particularly relevant to the state of Texas which is ranked second in the nation in so far as birthrate and has the fourth highest population of children, those under the age of 18, living in poverty (Coleman, Burnam, Naishtat & Anchia, 2011).

It is important to note that financial assistance for those wanting to pursue higher education has been in place for several decades especially for gifted and talented students and those who served in the military most notably the GI Bill of 1944. However, the 1960's was a

pivotal turning point in U.S. history with regard to financial support for students and the creation of programs and services encouraging low-income and first-generation students to go to college the majority of which at the time were African American and Latino. During this time period, known as the War on Poverty, the United States Federal Government made a concerted effort to encourage underrepresented populations to attend college (Long, 2012). The passage of the Economic Opportunity Act of 1964 and the Higher Education Act of 1965 provided financial assistance like never before in history for students to pay for college (Long, 2012). During this time, Educational Opportunity Grants emerged, a precursor to today's Pell Grant, the Job Corps program was created, and the National Defense Student Loan was expanded, all in an effort to make college more affordable for students (Long, 2012). However, of significance was President Johnson's support of these initiatives and his desire to improve access to higher education for low-income students by investing in programs and services so that first-generation students had an opportunity to attend college. Due to Johnson's efforts, The TRIO program was established which included Upward Bound (created in 1965), Talent Search (created in 1965) and Student Support Services (created in 1968) all programs designed to prepare high school students for college. According to Long (2012), these programs not only opened doors to higher education for low-income and minority students but established a role for the federal government in supporting such efforts.

In addition to programmatic efforts, this time in history saw what some would say a massive reform to federal financial aid, moving away from funding for specific populations and gifted children, to need-based funding for students demonstrating academic potential (Long, 2012). The establishment of the Equal Opportunity Grants which provided states and subsequently institutions financial aid for students who had the academic potential to attend

college but lacked financial support was created in an effort to open a pipeline to higher education for disadvantaged students. This program in addition to the Guaranteed Student Loan Program served as a major departure by the federal government to solely fund special populations and provide financial assistance to deserving students in an effort to provide access to higher education (Long, 2012). Historically, the 1960's proved to be a significant time of support for low-income and first-generation students to attend college with an acknowledgement by the federal government that not only does funding need to exist for students to even consider higher education but programs and services targeting disadvantaged students must also be created; funding on its own, is not enough (Long, 2012). However, upon extensive review of the initiatives established during the War on Poverty, Long (2012) found that although enrollment increased amongst low-income students as a result of the financial assistance and TRIO programs, significant gaps and barriers continue to exist for low-income, minority students compared to other populations of students. Questions as to whether there is enough funding, whether programs are targeting disadvantaged students appropriately and whether educators themselves are doing enough to support low-income, minority students abound.

Prior to the work of Long (2012), Nieto (1994) recognized that "our schools continue to fail children from culturally rich but economically oppressed backgrounds due to school policies, procedures and practices that add roadblocks to children's ability to be academically successful" (p. 393). Nieto (1994) also stated that "school reform alone, changing policies and procedures, is not enough unless it is in conjunction with educators believing that low-income, culturally diverse, non-native speakers truly deserve and are seen as capable of an education and academic success" (p. 395). This is particularly important for Latino, African American and Native

American children (Nieto, 1994). Nonetheless, roadblocks continue to exist for these students including access to higher education and a lack of funding.

In response, educators, lawmakers and philanthropists have attempted to address these concerns by creating early college high schools (ECHS). Early college high schools are designed to permit students to obtain a high school degree while completing the first two years of college without paying tuition thus reducing time to degree completion, increasing the number of minority students who attain a Bachelors degree and closing the gap between lower and higher income populations. Support nationally for the early college high schools, financially, legislatively and programmatically, has primarily come from the Jobs for the Future program which is funded through public and private partners including individuals, foundations and government entities such as school districts. Additionally, the Bill and Melinda Gates Foundation has been a significant contributor to the development of and research related to early college high schools. Together they established the Early College High School Initiative which beginning in 2002 either redesigned or implemented more than 230 schools in 28 states serving more than 47,000 students of whom 70% were students of color and 59% were low-income students eligible for free or reduced lunch (“Early College High Schools,” 2010, p. 3). California, New York, North Carolina and Texas lead the nation in the number of programs with Texas having 44 early college high schools according to the website, Texas High School Project (2011), an alliance established in 2003 that is dedicated to improving the college readiness of low-income students.

Initial studies have shown that early college high schools have had a positive impact on students’ success academically and financially. According to Webb and Mayka (2011), most of the students enrolled in early college high schools earned college credit at no additional cost with

24% of the students earning an Associate degree while earning their high school diploma. Furthermore, the majority of students enrolled in early college high schools are of color with 37% of the students being Latino which demonstrates an increase in overall participation in higher education by minority, low-income students, a primary goal of these schools (Webb & Mayka, 2011).

### **Statement of Problem**

While initial research strongly suggests the effectiveness of early college high schools, particularly in addressing graduation rates, closing the achievement gaps between underserved populations and their counterparts and provided much needed financial assistance, little is known as to the academic and social impact these programs have on students not only while progressing through the program but in the years following the program.

According to Tinto (1988), in order for a student to succeed in higher education and thus in society, a student must not only be engaged intellectually but socially in their college community. Tinto (1988) argues that in order for students to be academically, socially, morally and professionally developed upon the completion of a college degree, a student must undergo stages of departure or separation prior to and throughout a student's higher education experience. Although it is recognized that these stages of separation are very complex, Tinto (1988) asserts that students may not be aware of what is required of them so as to fully transition and integrate into college life; that students may pass through these levels of departure with little acknowledgement (p. 448). Therefore, it is essential that educators understand this theory not only to better support students as they progress through these stages, but to provide the necessary levels of engagement academically and socially so they can be successful overall. However, what is the impact on a student's overall development if and when a stage of departure is



modified or in some situations, skipped entirely as is the case with students participating in early college high schools? According to Tinto (1988), activities such as being a member of a student club, participating on an intramural team or living on campus, highly influence a student's overall development while in college. Although most early college high schools are located on or near a college campus, most often a community college campus, the format of the program may prevent students from being engaged at the high school and/or college to the degree to which students not participating in early college entrance programs can be. According to Muratori, Colangelo and Assouline (2003), students in an early entrance program may have missed or perceived to have missed out on extra-curricular activities such as varsity sports, band or school dances, due to the additional college curriculum resulting in a longer than normal school day. Therefore, one could assume that early college high school students are missing out on experiences that shape their overall social development which in turn, negatively impact their academic and professional achievements.

Tinto (1988) states that the first stage of a student's college career requires him/her to separate from one's current community, specifically high school and if at all possible, one's neighborhood. According to Tinto (1988), this separation is necessary so that students adopt the behaviors and norms required of college students. Tinto explains that past communities such as one's high school community has a unique set of norms and demands that are very different from those required to be successful in higher education. Tinto (1988) argues that if students do not separate themselves from past communities, students may not be able to fully integrate into the social and intellectual college community thus finding the college experience less rewarding and less impactful. Students attending early college high schools may not experience this separation/departure since these programs, although often located on a community college

campus, continue to group students together as a cohort. Given the fact that these students are not making a full departure from high school and if Tinto's theory is correct, early college high schools may be impacting a student's overall social and moral development. Specifically, students enrolled in early college high schools are not fully separating from a group from the past, in this case, high school, and fully adopting the characteristics and norms of the higher education community which Tinto deems necessary in order for students to be successful.

Over the past several years, considerable time and effort was spent by the researcher reviewing the literature pertaining to early college high schools as well as consulting with those who oversee or work directly with these programs. Through these efforts it has been found that although there is extensive data and research pertaining to the financial success of these programs as well as how early college high schools have helped to close the educational gap between those who have a college degree and those who do not especially for minority students, only a handful of studies (Muratori, Colangelo & Assouline, 2003; Noble et al., 2007) have focused on the social, emotional success of students engaged in these programs as it relates to their adjustment to a four-year, public, research institution. Furthermore, questions are beginning to arise within the higher education community about whether students who matriculate to a four-year institution have garnered the academic and social experiences deemed necessary and relevant for success in college and the world of work.

The degree to which early college high schools are preparing students for a successful adjustment academically and socially beneficial along with students' ability to adjust academically and socially to four-year, public institutions, remains an unanswered question.

## **Purpose of the Study**

Recognizing that in today's world, a college degree is often needed to obtain a middle-class job, it is alarming that the gaps between the college educated and those that are not, are larger than ever before (Gandara & Contreras, 2009). At the same time Latinos are the fastest growing population in the United States and yet academically, they are further behind than any other ethnic group in the nation (Gandara and Contreras, 2009). Knowing that early college high schools serve a vital role in closing the achievement gaps for low-income, minority students enabling them to obtain a high school diploma and an Associate's degree while facilitating a pathway to a Bachelor's degree, further understanding of these students, particularly Latino students, adjustment academically and socially to a four year public institution, is necessary. Most of the research in this area has focused on the financial and academic success of these programs rather than the academic and social adjustment of these students to a four-year, public institution with very little of the research pertaining to Latino students.

The purpose of this research study is to better understand the academic and social adjustment of students during the first semester at the four-year, public, research institution who attended early college high schools compared to students who did not participate in these programs. In particular, this study will examine students' perceptions of their academic achievement and social involvement while in high school, their perception of academics and campus involvement prior to entering the four-year, public institution as well as their perception of how academically successful and socially involved they were the first semester at the four-year, public institution. Given the nature and purpose of early college high schools and the fact that students upon completion of these programs have acquired the academic competency through coursework to be classified as juniors upon entry to a four-year, public institution, it is

not unreasonable to assume that this group of students should be socially developed as well, despite the age difference compared to students who entered the institution in a more traditional manner and are currently classified as juniors.

Realizing the need for access to higher education by minority students, the role early college high schools have had in closing existing academic achievement gaps and the impact that socialization in high school and college has on a student's success in school and in society, I pose the following research questions:

1. What is the academic adjustment of students who participated in an early college high school and matriculated to The University of Texas at El Paso (UTEP) compared to students who did not participate in an early college high school program and matriculated to UTEP after their senior year of a traditional high school?
2. What is the social adjustment of students who participated in an early college high school and matriculated to The University of Texas at El Paso (UTEP) compared to students who did not participate in an early college high school program and matriculated to UTEP after their senior year of a traditional high school?

### **Significance of the Study**

Historically, much research has been conducted of Latino students' barriers to academic success due to socially constructed factors such as language, work obligations and lack of economic resources (Delgado-Gaitan, 1992; Valdes, 1996; Goldenberg, Gallimore, Reese & Garnier, 2001; Lareau, 2003) as well as success factors related to higher education (Tinto, 1987, 1988; Astin, 1993; Kraemer, 1997; Pascaarella & Terenzini, 2005). Given the increase in the population growth of Latinos, the fastest growing ethnic group in the United States according to Gandara and Contreras (2009), these studies have served a much needed purpose especially at

the elementary and high school levels. However, as our nation continues to grapple with how best to educate children, and programs such as early college high schools grow in popularity, a viable solution to closing the academic achievement gaps of minority students, it is more important than ever that there is an understanding of how these programs impact students academic and social adjustment to a four-year institution. Although designed to reduce time to degree and remove significant financial barriers to obtaining a college degree, the question as to whether early college high schools programs are preparing students well enough for the eventual academic and social adjustment to a four-year institution is a relevant one.

## **Chapter 2: Literature Review**

The literature pertaining to early entrance to higher education abounds with research and anecdotal accounts that support initiatives such as the early college high schools and especially the participation of minority students in these programs. In recent years, particular attention has been paid to Hispanic or Latino students due to their underachievement academically and lack of enrollment in college. Upon first glance, one could assume that low academic achievement of Latino students is due to a lack of support for education by their family (Valdes, 1996; Lareau, 2003). However, research indicates that the problem is not that families do not support education, but rather socially constructed factors such as language, work obligations, and lack of economic resources that impact a student's ability to succeed in school (Hesburgh, et al., 1971; Sotomayor, 1974; Delgado-Gaitan, 1992; Valdes, 1996; Goldenberg, Gallimore, Reese & Garnier, 2001; Lareau, 2003). Parents in particular, view education as a means of upward mobility for their children and desire that their children not only learn English but attend college and graduate (Valdes, 1996; Lareau, 2003). Recognizing that providing a challenging learning environment can positively impact students, researchers began to question the social and academic impact early entrance programs like the early college high schools could have on a student's overall development especially as it relates to one's identity (Erickson, 1980; Tinto, 1988; Muratori, Colangelo & Assouline, 2003). Additionally, research shows that students who are fully engaged in their college community are not only academically and socially more successful but graduate in a timely manner and are better prepared for the world of work (Tinto, 1988; Astin, 1993; Pascarella & Terenzini, 2005).

In the following sections, I review academic research concerning (a) the purpose of higher education and the evolution of early college high schools; (b) ethnic isolation amongst

Mexican American students (c) the relationship between the minority status and academic achievement among Latinos, (d) the potential for programs such as early college high schools to positively influence academic achievement and postsecondary participation, (e) concerns associated with social and emotional maturity of relatively young students (high school juniors and seniors) interacting with their postsecondary peers, (f) academic and social adjustment of formerly early college high school students entering full-time postsecondary institutions as college juniors, (g) the impact student engagement and involvement, while in college, has on academic success and (h) the stages of departure and identity development that could have an immediate and long-term impact on students participating in college early entrance programs. While remaining committed to programs such as early college high schools, and believe that such programs can contribute to the academic attainment of Latino students, the purpose of this research is to examine the academic and social adjustment as students transition from an early college high school to a postsecondary institution.

### **Purpose of Higher Education**

Higher education has evolved over time from an era in which institutions were seen as appendages of their churches to being recognized as an essential step in obtaining the knowledge and skills needed to work in a global economy (Geiger, 2005). At the same time, higher education has been the subject of increased scrutiny by legislators, taxpayers and even students themselves especially in terms of degrees awarded, access to higher education and the overall cost of attendance. Geiger (2005) concurs to some extent stating “the advancement of basic knowledge, the special province of universities, should now be recognized as a national asset of inestimable value” (p. 65). As a result policies and laws have been enacted often emphasizing a

broader agenda quite different from the goals and objectives established at individual institutions.

Increased scrutiny as to the role high education should play academically, civically and economically did not come about overnight but has been a topic of debate for years. Although the United State's 200 year-old tradition in which colleges, traditionally rooted in liberal arts, has focused on preparing individuals to be productive citizens with an emphasis on character development, the rising cost of tuition has prompted students, parents and politicians to question the value of the undergraduate degree. More recently, business leaders and legislators have demanded greater emphasis on career development by institutions of higher education in order to strengthen the economy thus causing tension amongst educators and continued debate as to the real purpose of higher education. Yet, Americans, want public schools to not only look out for the needs of our individual children but to foster civic virtue; to support the democratic ideals in which the United States is built on. To this end, legislators strive to find one system that will "fix" public schools, solve all of the problems and educate children to become actively engaged citizens. Gutmann (1990) challenges this long-standing perspective by proposing a democratic alternative, the public debate. Gutmann (1990) believes that as Americans, the constant tension that emerges when pursuing individual freedom and believing in civic virtue, is critical to a democratic nation, Although this tension can be difficult at times, Gutmann (1990) points out that the alternative to not living with tension can be far worse not only for the public school system but for society,

Kahlenberg (2011) said it best stating that college is to "ensure every student no matter the wealth of their parents, has a chance to enjoy the American dream, educate leaders in our democracy, advance learning and knowledge through faculty research and give students the



opportunity to broaden their minds even when learning does not seem immediately relevant to their careers, teach students how to interact with people different from themselves and to help students find their passion, their purpose in life” (para. 3).

### **Evolution of Early College High Schools**

Early college high schools are designed to permit students to obtain a high school diploma while completing the first two years of college without paying tuition, reducing time to degree completion and attempting to close the gaps between students from economically disadvantaged families and those from more affluent ones (Pennington, 2004). Pennington (2004) explains that the concept and support to build a bridge between the last two years of high school and the first two years of college gained momentum with the implementation of the Advanced Placement program (AP) more than fifty years ago. In 2002, the Early College High School Initiative formally began involving several organizations who together, created or re-designed schools to become Early College High Schools (“Early College High School Initiative,” 2013). These schools blend the last two years of high school with the first two years of college in order to offer academic rigor and the chance to save money (“Early College High School Initiative,” 2013). Partners and sponsors of the Early College High School Initiative include the Bill & Melinda Gates Foundation, along with Carnegie Corporation of New York, the Ford Foundation, Lumina Foundation for Education, Dell Foundation and the W.K. Kellogg Foundation (“American Institutes for Research and SRI International,” 2008).

Since 2002, more than 240 early college high schools have emerged located in 28 states including the District of Columbia serving more than 75,000 students (“Early College High School Initiative,” 2013). These schools are purposely designed for those underrepresented in higher education including first-generation college students, low-income and minority students

(“Early College High School Initiative,” 2013). Financial investment in these programs is strong with the American Institutes for Research and SRI International (2008) reporting a \$110 million investment in the initiative in 2006.

In the past, college-level coursework was only available to students deemed as academically advanced. However, providing low-performing students a rigorous and supportive atmosphere with the hopes of increasing their interest in college has proven not only motivational but a way of removing financial barriers to attending college (“American Institutes for Research and SRI International,” 2008). As of the time of this study, California, Texas, North Carolina and New York lead the nation in the number of early college high schools with 75 percent of students being African American or Latino and 59 percent of the students are eligible for free or reduced lunch (“Early College High School Initiative,” 2013).

In a report issued by Jobs for the Future on the Early College High School Initiative in 2011, 66% of the students who started in an early college high school will progress to graduation on time, 14 percentage points higher than those enrolled in traditional high schools in the same districts as the early college high schools. Furthermore, in 2009, the average attendance rate for students enrolled in early college high schools was 94% and was even higher if the school was located on a college campus (“Early College High School Initiative,” 2011). In 2010, data indicates that 5,414 students graduated from early college high schools throughout the nation with their overall achievements surpassing their peers attending traditional high schools (“Early College High School Initiative,” 2013). Furthermore, of the 5,414 graduates, more than 250 students earned merit-based college scholarships and 65% earned two or more years of college credit. Most notably, the average graduation rate for students enrolled in an early college high school was 84% compared to 76% for their school district, thus indicating the significant positive

impact these programs are having on students in terms of closing the education gaps and enabling low-income, minority and/or first-generation college students that opportunity to pursue higher education (“Early College High School Initiative,” 2013).

### **Ethnic Isolation Amongst Mexican American Students**

Barriers to minority students receiving a quality education have existed for decades. The United States Commission on Civil Rights outlined the extent to which ethnic isolation occurs amongst Mexican American students in schools in the Southwest in a series of reports issued in the early 1970s based on data collected by the Department of Health, Education and Welfare 1968 survey. The scope of work included assessing the overall ethnic composition of schools and school districts, teachers and administrators ethnic backgrounds, barriers to academic success such as no support for one’s native language, lack of participation by parents, and the exclusion of Mexican American history and culture from the curriculum. The data gathered through the survey was concerning to the Commission due to the extent to which ethnic isolation was occurring in public schools in the Southwest (Hesburgh et al., 1971). Furthermore, the findings indicated that Mexican American students in Texas had been more isolated from Anglos than anywhere else in the Southwest. Report 1 of the Commission states that Texas had the greatest number of Mexican American pupils in predominantly Mexican American school districts with the majority of the isolation occurring in the elementary schools; critical development years in a child’s life (Hesburgh et al., 1971).

Although the Commission’s reports focused on schooling, the group also learned that ethnic isolation of Mexican Americans in Texas pervaded far beyond the classroom walls. The findings research showed that although there were no laws requiring isolation of Mexican Americans in Texas after 1948, many practices had been implemented promoting isolation and

discrimination including preventing Mexican Americans from buying homes and difficulty securing jobs beyond manual labor (Hesburgh et al., 1971). Not only did Mexican American children in Texas experience isolation and discrimination in school but it surrounded them all the time.

The negative outcomes based on deliberate isolation were numerous according to the findings by the Commission. Children's native language was not accepted and children were prohibited from speaking Spanish in the classroom and on the playground. These students were further isolated from Anglo children by being assigned to another classroom until they overcame their "language handicap." Students were expected to understand the customs, traditions and way of life associated with Anglo children. Textbooks, exams and activities were geared towards an Anglo student's lifestyle and never was history or culture of Mexican Americans introduced into the classroom (Hesburgh et al., 1971).

Additionally, the number of Mexican American teachers, principles and school board members were severely lacking. Moreover, teachers who were working with this population had never been trained to address needs of Mexican American students. "Para Los Ninos" a subsequent report published in 1974 by Sotomayor brought to light the struggles that young children faced in adapting to their new school including a total disregard for the student's culture and self identity. As a result, the majority of this population dropped out of school and never obtained a high school diploma (Sotomayor, 1974). At the time of the Commission's report, California was the only state to take some action officially to eliminate ethnic isolation with the passage of Title 5 of the California Administrative Code (Hesburgh et al., 1971). However, despite the adoption of state and federal laws since this time, Texas continues to struggle in

ensuring quality education for all children including support for post-secondary degree completion.

### **The Texas Education System and its Impact on Low-income Students**

Despite the extent to which ethnic isolation existed in the Southwest as documented in the U.S Commission on Civil Rights reports, the misperception that economically disadvantaged students are unable to engage in the classroom and therefore, not succeed academically, prevailed. Researchers began to examine how educational practices, policies and accountability systems may inadvertently limit opportunities for Latino students. The research in this area is particularly relevant to the state of Texas which is ranked second in the nation in so far as birth rate and has the fourth highest population of children, those under the age of 18, living in poverty (Coleman et al., 2011). Additionally, Texas is ranked second highest in the percent of the population that is unsure of where its next meal will come from (Coleman et al., 2011). Most alarmingly though, 66% of Latino children residing in Texas, the fastest growing population in the state and the nation, live below the nation's poverty line (Coleman et al., 2011).

The Texas educational accountability system ignores the fact that borders exist within the state which has a history of not supporting public agencies of any kind even during times of prosperity (McNeil, 2000). The fact that Texas is second in the nation in child population growth, first in the nation in uninsured children and second in percentage of population that goes hungry are clear indicators that borders exist in Texas (Coleman et al., 2011). Although many would contend that school reform, particularly the development of standards, ensures a quality education for all children, few understand the unintended consequences of such reform that arguably has negatively impacted the academic success of students from low-income, working-class families.

Valenzuela (2005), noted researcher and educator, challenged the Texas system of educational accountability stating that the system is doing more harm than good. High-stakes testing, the core problem, promotes a test-driven curriculum and award-driven programs that does not assist schools or children in need of additional help (Valenzuela, 2005). In the context of high-stakes accountability, teachers were forced to adopt defensive teaching strategies which resulted in student boredom directly impacting students from low-income, working class families. According to Valenzuela (2005), the system neglects a student's culture, language and ability to acquire knowledge.

The situation in Texas is not one that emerged over night but rather something educators have struggled with for decades. Sweeping reforms, most notably House Bill 72, created misalignment with the academic needs of children and has had a profound impact on teachers and administrators. According to McNeil (2000), the success or failure of specific provisions outlined within HB 72 have not had the most devastating impact, rather the move towards a centralized system of accountability that engages the corporate elite rather than the citizens of the community or even the educators themselves has had the greatest impact. McNeil (2000) argues that the implementation of standardized testing, a formative method of accountability legitimized by legislators and the corporate elite, has not fostered academic success for students from low-income, working-class families but rather has resulted in the narrowing of the curriculum and severely limits a teacher's method of instruction. The move to standardized testing did not address such core issues as a lack of textbooks, supplies and physical space at the institutional level; fundamental problems that schools were facing regularly. HB 72 shifted authority to determine curriculum, assessment and funding from the local district and school board level to

the Texas Education Agency (TEA) in an attempt to link state educational policy to national economic and political structures (McNeil, 2000).

In this type of system, the need for fundamental resources such as books, supplies and even increased teacher pay are ignored while development of standardized student and teacher exams, subsequent training programs and related materials are funded causing the general public to think that legislators view education as a priority (McNeil, 2000). However, the corporate-elite, specifically Ross Perot, appointed by Governor Mark White to examine teacher pay, did not analyze state funding for education closely enough to understand the increase to financial support for education in recent years had only impacted non-instructional areas such as rising costs for energy and transportation or federally-required initiatives such as bilingual education thus causing a strain on local school district's budgets. McNeil (2000) found this centralized approach to education assumed that management was the problem and the reason students were not academically successful and did not take into account the challenges children faced including but not limited to limited English proficiency, poverty, lack of educational resources and deteriorating facilities. Perot and his team addressed issues in isolation rather in relationship to other competing factors further complicating the funding formula and ultimately not benefiting the children (McNeil, 2000).

Ultimately in an effort to improve education, recent reforms such as HB 72, do not address the content of schooling or the lack of critical resources but rather consequently alienated teachers who are experts in their subject matter and know how to engage students so as to achieve student success (McNeil, 2000). The situation in Texas is a painful reminder of how the best of intentions coupled with minimal resources and a desire for centralized control has resulted in greater disparity between students from low-income, working-class families and those

from more affluent ones. Reforms such as these have propelled researchers to examine the impact a student's community can also have on one's academic development, especially those from low-income families.

### **Academic Achievement among Latinos**

For decades child development was viewed as a way in which children were understood rather than a socially constructed process. However in recent years, researchers have begun to further examine a child's development and ways in which one's gender, race, class and family can influence this development and predict a child's ability to succeed in school. The research in this area is particularly relevant when studying the underachievement of Mexican-American children in the classroom; the fastest growing population in the United States. According to the 2010 Census, 50.5 million people of the 308.7 million people who reside in the United States were of Hispanic or Latino decent. This is a 13% increase from data collected in 2000, a total increase of 15.2 million. Of the total Hispanic/Latino populations, 41% live in the Western part of the United States with more than half of the population living in California, Florida and Texas. Additionally, El Paso, Texas, was one of the top 10 places in the United States in so far as numbers of Hispanics, 81% (U.S. Census Bureau, 2010).

Recognizing that in today's world, a college degree is often needed to obtain a middle-class job, it is alarming that the gaps between the college educated and those that are not larger than ever before (Gandara & Contreras, 2009). Gandara and Contreras (2009) explain that Latinos are the fastest growing population in the United States and yet academically, they are further behind academically than any other ethnic group in the nation. The researchers explain that the "demands of contemporary American society are outpacing the ability of post-immigrant generations of Latinos to overcome the educational and socioeconomic barriers they confront



and as a result, the economic and social impact on the United States will be terrible” (p. 2).

Gandara and Contreras (2009) explain that the number of baccalaureate degrees awarded to Latinos over the past two decades has not increased for twenty years and yet the population has dramatically increased during this same time period. Therefore, a closer examination of the Mexican-American family as educators and the influence of the child’s home environment is necessary.

Delgado-Gaitan (1992), utilizing personal interviews and observations, concluded that Mexican-American parents provide high levels of emotional support that encourages children to value education. Furthermore, their own lack of education serves as a motivator for their children to achieve even more than they themselves did (Delgado-Gaitain, 1992). Despite the lack of academic preparation of the parents who participated in the qualitative study, Delgado-Gaitain (1992) determined that there was a strong belief in structure within the home that included time for homework, discipline and a routine within Mexican-American families. Additionally, Mexican-American families believed in a much broader definition of an educated student; one that not only consisted of the completion of an academic program but also included respectful cooperative behavior by the child as well (Delgado-Gaitan, 1992). Understanding the complexity of socialization amongst Mexican-American students and the high value placed on education causes us to further evaluate how these students learn.

Valdes (1996) utilized an ethnographic study to investigate how Mexican immigrant families categorized as working class or poor, not only survived in the United States but whether they value education. Valdes (1996) concluded that despite economic hardships, these families have strong family values including education. However, despite this positive attitude towards education, parents did not necessarily equate “true success” with attending school or obtaining a

degree (Valdes, 1996). The fact that someone pursued formal education simply meant that they had “an opportunity to do so and a desire to do so” (Valdes, 1996, p. 133). At the same time, a bright and talented child who did not do well in school did not mean a lack of desire by the child but rather that the child did not apply him or herself or “*no se aplica*” (Valdes, 1996, p 133). Nonetheless, the study indicated that learning English was essential to one’s overall success especially for children (Valdes, 1996). Valdes (1996) found that upon arrival to the United States, children are lectured about the need to learn English and as a result, going to school was essential. The insights Valdes acquired as a result of his ethnographic study draws attention to the need to better understand the connection between family and school.

Goldenberg, Gallimore, Reese and Garnier (2001) found similar outcomes from their longitudinal study, concluding that Latino parents from the very beginning of their child’s formal education, kindergarten, had high aspirations that their children would not only attend college but would obtain a degree. Additionally, Latino parents recognized that formal education provided advancement in the workforce which in turn meant additional compensation (Goldenberg, et al., 2001). This further reflected the educational aspirations Latino parents have of their children to pursue high levels of formal schooling, including higher education. However, Goldenberg et al. (2001) also found that although Latino parents had high aspirations for their children to attend college and receive a college degree, parents’ expectations that their children would actually accomplish this goal were not as high. Through personal interviews the researchers found that many of the parents believed that despite their educational goals for their children, the decision is ultimately up to the child as to whether the child obtains a degree (Goldenberg et al., 2001). Additionally, Latino parents expressed real concern for environmental and financial influences that could impact their child’s ability to go to college. These influences

included drugs and gangs due to the community they reside and an inability to afford college (Goldenberg et al., 2001). Further analysis determined that despite Latino's parents' very high aspirations for their children to pursue formal education, it was the parent's academic expectations, not aspirations, which influence a student's success in school at a very early age (Goldenberg et al., 2001).

Lareau (2003) like Valdes (1996) acknowledges the school-home relationship but broadens the focus to include an analysis of home-life itself and extracurricular activities as they pertain to class and race. Lareau (2003) conducted interviews with working class and middle class children and families, teachers and administrators and performed in-school observations in order to gain insight into the lives of the children. Lareau (2003) and her team spent hours observing children and their families in their home environment providing a much deeper level of understanding of how class and race plays a role in a child's development at an early age. Lareau's research uncovered major class differences between parenting styles that she explains as "concerted cultivation" amongst middle class families and a process of "natural growth" in working class families. Middle class parents provided their children activities that supported their personal growth and overall development all the while carefully aligning these activities with the ideology of teachers, coaches and even dance instructors ultimately benefiting children (Lareau, 2003). The "natural growth" that occurs in working class families according to Lareau (2003) is often more spontaneous with a focus on providing children basic needs. Although children of working class families may desire structured activities, especially sports, parents lack funding and time to devote to these activities. However, Lareau (2003) states that this type of parenting should be referred to as an accomplishment because like concerted cultivation, "this type of commitment too, required ongoing effort; sustaining children's natural growth despite

formable life-challenges is properly viewed as an accomplishment” (Lareau, 2003, p. 238). Lareau’s work brought to light that one’s cultural capital as a result of concerted cultivation garnered results within the educational system enabling students to make the rules work for them. The research clearly showed that children with “mature” cultural capital came from families of wealth, whereas children from working-class or poor families had not acquired these skills due to the “natural growth” process (Lareau, 2003). Children from low socioeconomic income levels struggled with the educational system. However, despite the differences that played out in the classroom, Lareau (2003) found that although parents of working-class families clearly struggle to meet basic needs, they value education immensely and recognize the need for their children to attend school.

### **Community Impact on Student Academic Success**

Research indicates that teachers, parents and community members can have a profound influence on economically disadvantaged Latino students. “Culture brokers” as Cooper, Denner and Lopez (1999) reference them, can assist students in overcoming a key period of vulnerability, the time between elementary and middle school. It is during this period of time that these students in particular, are vulnerable to the negative relationships that surround them and thus culture brokers can serve as the bridge between a world of low achievement due to drugs and violence and a world with promise; fulfilling a dream of a well respected and highly valued job (Cooper et al., 1999). Cooper et al. (1999) found that upon entering middle school, Latino students recognize that they could have a future far better than that of their parents. Consequently Latino students seek out role models such as older siblings and adults other than their parents including teachers. However, Cooper et al. (1999) found that teachers, who shared the same education ideals for Latino students as their parents, often hindered a student’s ability

to academically succeed due to standardized tests and forcing these students to pursue vocational or remedial classes rather than college-prep courses most often due to issues with language (p. 52). Cooper et al. (1999) asserts that if parents, teachers and community members joined together in support of Latino students, these students would not only be socially successful but academic persistent as well.

The impact of teachers is well documented and the perception a student has of the teacher can make a significant difference in her academic success and persistence. Foster (2008) focused on student's perceptions of their teachers prior to and after participating in an early college high school; a program that focused on economically disadvantaged, first-generation college students. As a result of her study, Foster (2008) found that students entered the early college high school with little experience of persisting academically and often gave-up when they experienced difficulties. Through a series of interviews, Foster (2008) determined that the reasons for the lack of persistence academically, prior to enrolling in the early college high school, was because the students had more often than not only experienced short, specific assignments, referred to as the "worksheet mentality" which did not focus on persistent, sequenced learning. Furthermore, students perceived their high school teachers as teaching for a paycheck and that school was more like a day-care center which promoted an environment in which minimal effort was needed in order to succeed (Foster, 2008). In contrast, the student's experience in the early college high school was enlightening; one in which teachers were seen as educators and advisors (Foster, 2008). Foster (2008) found that students spoke of a renewed sense of optimism and hope for the future as well as a desire to obtain a college degree once enrolled in the early college high school.

The influence of teachers along with increased academic rigor are just some of the positive outcomes that college early entrance or accelerated learning programs can have on economically disadvantaged, minority and first generation students (Cooper et al., 1999; Foster, 2008). The impact of the economy, the desire to provide increase access to higher education for low-income students and the need to ensure that the workforce is well prepared for the future, has cause some to search for creative ways to provide underrepresented populations a path to college that is both affordable and accessible (Vales, 1996; Goldenberg, Gallimore, Reese and Garnier, 2001). Given the current economic climate Zusman (2005) expressed uncertainty as to future support by states for higher education and the “widening gaps between the “haves” and the “have-nots” in the US Higher Education System” (p. 123). Zusman (2005) reports that states contribute less that 30 percent or one-third to a public institution’s budget but at the same time, close to 50 percent of state monies are allocated to the K-12 school system and Medicaid due to state and federal requirements. As a result students, their families and institutions have had to shoulder the financial burden associated with obtaining a college degree. Although states such as Texas have deregulated college tuition allowing post-secondary institutions to determine their own tuition and fees, universities have had to look to additional sources of income such as grants, patents, government contracts and for-profit ventures, to supplement there budgets while students have had to turn to loans (Zusman, 2005). Research indicates that if this trend continues, non-traditional students including first-generation students will not have an opportunity to obtain a post secondary degree (Geiger, 2005; Zusman, 2005).

Despite economic uncertainty, McGuinness (2005) reports that state, national and worldwide leaders acknowledge that higher education is essential for a state or nation to compete in a global economy. According to McGuinness (2005), the role of state governance and changes

in expectations of higher education has caused state policy makers to focus on capacity utilization rather than exclusively capacity building. State policy-makers have a heightened awareness of state appropriations for higher education including financial aid causing institutions to depend more and more on tuition revenue as a major source of income.

The need for more people to be college educated, the lack of state appropriations to higher education and the desire to close the academic achievement gap of minority students, researchers, educators and legislators have been examining ways in which further partnerships can be established between Universities and local community colleges and school districts to provide access to higher education for all students. Preliminary research indicates that the Early College High Schools Initiative, established by the Bill & Melinda Gates Foundation, is having a positive impact on High Schools, Colleges and the students themselves (Webb & Mayka, 2011). The foundation of the Initiative is a belief that all students with proper support can achieve a college degree and that this type of program provides traditionally underrepresented youth a direct pipeline through college (Core Principals, 2008, p.1). Schools participating in the initiative support a set of core principles ranging from a commitment to serving students underrepresented in higher education to supporting a structure that develops academic and social skills. States have adopted policies in support of such initiatives as is the case for Texas. At the same time, the public has called into question the teaching and learning occurring in high schools which has resulted in state and national legislation intended to hold teachers and administrators more accountable for student learning; resulting in increased testing. Although the majority of 12th graders intend to pursue higher education knowing that a Bachelor degree will enable them to be more competitive in the job market, very few actually obtain a college degree (Baily & Karp, 2003).

Many states are implementing programs to not only increase high school graduation rates but “put more students on the path to and through college” (Hoffman, Vargas & Santos, 2009, p. 43). Hoffman et al. (2009) explain that more and more states are taking steps to align high school curriculum with college standards, ensuring that students successfully enroll in non-remedial, college-level coursework. Furthermore, research indicates that by providing more academic rigor and college-level work in high school, students are more likely to pursue higher education and are more successful academically when enrolled in college (Hoffman et al., 2009). A larger pool of low-income, first generation students pursuing college, a decrease cost in higher education expenses due to free college courses and increase motivation to earn a college degree thus increasing one’s earning potential, are additional positive outcomes of well thought out college-level work in high school (Hoffman et al., 2009). According to the researchers, if students earn “twenty or more credits in an accelerated high school program, such credit attainment should also be highly correlated with the student’s likelihood of earning a postsecondary credential” (Hoffman et al., 2009, p. 44).

### **College Early Entrance Programs and Student Development**

In addition to accelerated high school programs, several early college entrance programs and dual-credit programs have emerged. Dual-credit as well as early college high schools are recognized as initiatives to support education attainment by low-income, minority students. Dual enrollment programs permit high school students to enroll in college-level coursework and earn credit towards an Associates or Bachelors degree. Dual credit courses versus early college high school courses more often than not are taught at the high school but are facilitated by local community college instructors or high school instructors who have earned a Master’s degree in the content area, under the guidance of college professors. This approach is often termed as



concurrent enrollment. Dual credit courses are offered in core academic, technology and career related areas and are an option for 11<sup>th</sup> and 12<sup>th</sup> grade students who qualify for college-level enrollment based on a student's GPA, teacher recommendation and/or test scores achieved on either state standardized tests or college placement exams (Bailey, Hughes & Karp, 2002). Dual credit programs enable students to accumulate upwards of one year or more of college credit at no additional cost thus lessening the time to college degree completion.

Although once limited to students who were identified by faculty and administrators at high schools as only appropriate for students in college-prep tracks, dual credit courses are now seen as a way of increasing academic rigor, reducing high school drop-outs and facilitating the pathway to college particularly for low-income, minority students who encounter major financial barriers to pursuing an Associate or Bachelors degree (Bailey et al., 2002). In addition to saving money, Bailey et al. (2002) found that dual credit programs also serve to motivate low-achieving and bored students including those who tended to “slack off” their senior year of high school because these students saw the relationship between their achievements in high school with their future success.

Dual credit programs are on the rise with several states creating legislation requiring secondary and postsecondary institutions to not only create such programs but pay student's college tuition if enrolled in such programs as well as allowing both high school and college students to count dual enrollment as full time equivalent (FTE) when requesting state financial aid (Bailey et al., 2002). At the same time, Bailey et al. (2002) found that there is wide variance nationally in financial support of dual credit programs both at the institutional level and for students along with the enrollment requirements of such programs nationally

In addition to the financial impact dual credit programs can have on students, these programs can also help students make a more positive academic and psychological transition to college. Hoffman (2003) found that students enrolled in dual credit programs not only earn higher grades in college but persist at greater frequency than those who do not experience these types of programs. Furthermore, enrollment in dual credit courses as well as Advance Placement courses serve as a way to convince students that they have what it takes to be successful in college and provide students a sampling of college academics; demystifying the concept of college (Hoffman, 2003). Expansion of such programs will allow for increased opportunity for low-income, minority students to enroll in college level course work and provide for a more seamless education system between high school and college (Hoffman, 2003).

Research indicates that overall, students are satisfied with dual credit programs and that such programs not only benefit the student but society and colleges through a more prepared workforce which in turn positively impacts the economy and increased revenue for post secondary institutions due to broader college access (Museus, Lutovsky & Colbeck, 2007). In addition, participation in dual credit programs may have a significant impact in not only the decision to attend college but the type of college a student chooses to attend. Assuming the academic rigor influences a student's academic aspiration, then enrollment in dual-credit courses in high school could serve as a key predictor in whether a student attends college and the amount of time it takes a student to navigate the college environment as well as a student's ability to learn about the social aspects of a university (Museus et al., 2007). It is therefore essential that dual credit programs are not seen as an opportunity solely for privileged students but rather that dual credit programs are created and supported through policies that provide equal access (Museus et al., 2007).

In a recent national survey, Waits, Setzer, and Lewis (2005) found that 71% of public high schools in the United States offered courses for dual credit during the 2002-2003 academic year with 1.2 million enrollments in such courses. Furthermore, 74% of these enrollments were in courses taught on a high school campus versus 23% that were taught on the campus of a postsecondary institution (Waits et al., 2005). According to Waits et al. (2005), the remaining 4% of enrollments were taught through distance learning. It is also important to note that the researchers also found that the majority of classes offered for dual credit were had an academic focus (92%) versus a technological or career focus.

Research indicates that dual enrollment serves as a strong motivator to completing a degree or credential (Hoffman et al., 2009). This is further validated in a comprehensive study of Florida's dual enrollment participants in which researchers found that students who entered college after participating in the program, were more likely to continue a second semester and continued to be enrolled in college two years past high school. Students who had participated in Florida's dual enrollment program also had higher GPA's than students who did not participate in dual enrollment programs (Hoffman et al., 2009). Additionally, the Florida study found that low-income students with very low high school GPA's benefitted to a greater extent by participating in such initiatives than their peers who had more social and economic advantages. Low socioeconomic students also accumulated more college credit while in high school than their peers. Studies such as this one demonstrate the benefits of early entrance, dual credit and accelerated learning programs can have on students while still in high school especially for low-income, first generation students.

Unlike dual-credit programs, early college high schools are designed to permit students to obtain a high school degree while completing the first two years of college without paying

tuition; reducing time to degree completion and attempting to close the gaps between students from economically disadvantage families and those from more affluent ones (Pennington, 2004). Pennington (2004) explains that the concept and support to build a bridge between the last two years of high school and the first two years of college gained momentum with the implementation of the Advanced Placement program (AP) more than fifty years ago. The AP program along with dual enrollment programs in which high school students are enrolled in college-level courses, not only have gained popularity amongst students and their parents but considerable interest from policy makers who want to accelerate students entrance to college (Pennington, 2004). In 2001, more than 1 million AP tests were taken (Pennington, 2004). However, Pennington (2004) asserts that programs such as these along with early college high schools are not assisting the children who need them most, low-income, minority students. Recognizing that one's education and that "college graduates earn an average of 70% more than high school graduates," (p. 3), Pennington (2004) states that more needs to be done to bridge the gap between high school and postsecondary education otherwise, our entire nation is at risk of falling behind.

Born (2006) found that a key motivator for participating in an early college high school program was the financial assistance and the ability to obtain a baccalaureate degree in a short amount of time. Through a series of interviews with parents, teachers, students and administrators, Born (2006) found that intense personal and academic mentoring by teachers and other adults enabled students to be successful in the program. Upon further examination, he also found that the intense mentorship of these students served to bridge the gap between two very different types of institutions, high school and college, as well as provided a level of advocacy that these students had never experienced before (Born, 2006).

Hoffman, Vargas and Santos (2008) insist that in order for students participating in early college high schools to make a smooth transition to higher education and obtain a degree, a rigorous academic program must exist as well as financial support through at least the ninth grade along with comprehensive support that is school, family and community based. It is essential that the academic program transitions seamlessly between high school and college and incorporate varying degrees of academic intensity so that students are well-prepared for the academic rigor of college coursework (Hoffman et al., 2008). Additionally, the researchers found that attending college without charge, serves as a strong motivator for students to participate and succeed in early college high school programs (2008). However with this said, success of these programs depends greatly on the programmatic and financial partnerships that are established between high schools and institutions of higher education. In turn, these partnerships can have a direct impact on state policies as legislators hold educators accountable for closing the gaps and ensuring that more minority students are receiving college degrees (Hoffman, et al., 2008).

Texas is seen as a national leader in the creation of early college high schools. The state has adopted funding policies providing financial support for the development of the Early College High Schools Initiative including colleges and high schools both receiving “per pupil” or “contact hour/average daily attendance” funding for all enrolled students in the program as well as high schools receiving \$275 per student due to HB1 legislation (Goldberger, & Santos, 2009). Given the economic downturn and the financial obstacles that institutions of high education and students must overcome, the financial assistance associated with the programs is very attractive and enticing for all involved including policy makers.

Although some research has been conducted on the financial benefit of early college programs, including the high level of academic preparation students acquire in order to persist through college, very little research exists about a student's overall social development and career readiness as a result of enrolling in early college high schools and persist through college obtaining a Bachelor's degree. Questions such as does the current ECHS schedule and/or curriculum allow students to gain the out-of-classroom activities that research indicates as critical to a college student's overall development and success have begun to be asked and therefore need to be answered. Dey and Hurtado (2005) indicate that "undergraduates are recipients of collegiate influences that produce certain psychological, social, and economic outcomes for individuals as well as the larger society" (p. 316). If this is the case, what type of structured or unstructured co-curricular experiences are available to students who attend early college high schools and is adequate time allotted during the school day for students to have these experiences. Are these students ready for the workforce academically, technically and socially? Assuming that the financial benefits and academic preparation of students participating in these schools are the sole indicators of success ignores what Dey and Hurtado (2005) refer to as the process of personal choice which means a student is not only influenced by his/her environment but helps shape his/her environment.

While initial research strongly suggests the effectiveness of early college high schools, particularly in addressing graduation rates, closing the achievement gaps between underserved populations and their counterparts and providing much needed financial assistance, educators and parents have been reluctant to promote the program as a wide-spread formative alternative to traditional schooling because of the impact such a program could have on a student's social development. To this end, Rogers and Kimpston (1992) conducted a comprehensive meta-

analysis of 314 qualitative and quantitative studies on 11 types of accelerated programs including grade skipping, curriculum compacting, concurrent enrollment and early admission to college between 1965 and 1992 and found that although acceptable outcomes have been established in so far as academic performance, more research is needed to establish acceptable outcomes for social adjustment of students participating in accelerated programs. The researchers discovered that very little is known about the socialization and psychological effects of Advanced Placement programs in addition to the psychological effects of curriculum compacting and concurrent enrollment programs (Rogers & Kimpston, 1992). Although the majority of the studies on acceleration indicated no major problems with the students social and psychological adjustment, many of these studies examined small groups of students who did not interact with the high school student body or university population, which causes one to question whether students could adapt socially if they interacted with a broader group of people; students beyond their own cohort (Rogers & Kimpston, 1992). Based on the meta-analysis conducted by Rogers and Kimpston (1992), there is no evidence of a direct negative impact accelerated programs have on a students social and psychological adjustment but one must acknowledge that the research in this area is limited. Based on the data collected, the researchers encouraged educators and parents to be mindful of not only of the academic needs of children engaged in accelerated programs but the social and psychological needs as well (Rogers & Kimpston, 1992).

Recognizing that a student's transition from high school to college is a critical time in one's social and academic development, Muratori, Colangelo and Assouline (2003) attempted to uncover whether the overall transition and adjustment of students entering college early is in any way different, particularly in the areas of social and emotional development, than students who enter college at the traditional time upon completion of high school. Through a series of

interviews, student and parent surveys and general observation the researchers specifically examined the overall satisfaction of the first semester of college of students who participated in the National Academy of Arts, Sciences and Engineering (NAASE) early entrance program; an initiative involving 10 students who moved away from home and lived in the residence halls at the University of Iowa (Muratori et al., 2003). Research questions included but were not limited to how well the students made the transition from high school to the University of Iowa; what were the students' academic and social experiences their first semester; what students perceived they may have missed during their last year of high school because they had entered college early and, if given the choice again, would the student participate in the early entrance program again (Muratori et al., 2003). Upon examination of the data, major themes emerged which the researchers further analyzed so as to formulate their conclusions the first of these being homesickness.

The researchers found that although student's experiences with moving away from home were wide-spread, some students' experienced homesickness at an even more intense level and as a result had difficulty integrating fully into university life and consequently struggled with finding an attachment to college (Muratori, et al. 2003). However, it is important to note that NAASE students continued to maintain a link to their high school while participating in the program at the University of Iowa and were invited to participate in major high school activities such as homecoming, prom and graduation. Some students did attend homecoming with 7 students participating in graduation and 2 attending the prom (Muratori et al., 2003, p. 229). Maintaining such a strong connection to high school could have contributed to the intense feeling of homesickness. To this end, the researchers also found that several of the students contemplated leaving the NAASE program and returning to high school due to the level of



homesickness the students were experiencing (Muratori, et al., 2003). In addition to homesickness, a secondary theme of relationships emerged.

Muratori et al. (2003) also found that when students spoke of their experiences with NAASE or with high school within the context or framework of relationships, many of the students recognized that some of their relationships had undergone a transformation which often included increased emotional distance and a lack of things in common, causing them to outgrow the friendships they had maintained in high school. Knowing that past relationships impact the development of new ones, as evident with the students struggling with homesickness, students were able to make friends with members of the university community (Muratori et al., 2003). Furthermore, students who developed the strongest relationships, did so through their involvement in extracurricular activities (Muratori et al., 2003). Accordingly, those students who became very active on campus by participating in clubs, organizations and activities, had the strongest network of friends and consequently valued these relationships more than the ones they had in high school (Muratori et al., 2003). At the same time, when asked what high school experiences they perceived to have missed out on due to entering college early, students who expressed the most regrets about entering college early did not mention specific relationships but rather the missed opportunity of participating in varsity sports (Muratori et al., 2003). To this end, when asked by the researchers if they could make the decision all over again, would they participate in the NAASE program, six students said yes whereas four said no all due to either missing relationships at home or a perception of missing out on participation in varsity sports (Muratori et al., 2003). All in all, the work of Muratori, et al. (2003) reminds us that there is no single predictor of success when it comes to students who enter college early. In this particular case, all 10 students entering the NAASE program had an expectation of being further

challenged academically, socially and emotionally and although students did not experience the same type of challenges, it is accurate to state that each student was challenged appropriately and as a result were able to further refine their life goals (Muratori, et al., 2003).

In a more recent study conducted by Noble et al., (2007) among graduates from the Early Entrance Program at the University of Washington, it was found that some participants had difficulty forming either platonic or romantic relationships with the general student population at the university which may have impacted one's overall social development. In an attempt to assess the educational, work and relationship experiences while engaged in the Early Entrance Program and since graduation, the researchers created a 100-item questionnaire distributed to 211 alumni of the program who had graduated from college (Noble et al., 2007). Overall, 95 alums participated in the anonymous eight page survey that was conducted over a three month period. The researchers analyzed the data utilizing traditional qualitative methods. Recognizing that there had been significant changes with the Early Entrance Program between 1977 and 2003 such as a change in admission policies, new personnel and increased support for students that would impact the nature of data collected, the researchers identified three programmatic periods, Pre-Transition School (1977-1980), Early Entrance Program (1981-1989) and Mature Early Entrance Program (1990-2003) in which to analyze the data more effectively (Noble et al., 2007). Of those who participated in the study, 52% were female and 48% were male with the mean age of participants being 28.

Not surprisingly, the majority of participants (95%) entered the Early Entrance Program because they were excited to learn with many of the respondents indicating that the "acceptance by a peer group was the most beneficial outcome of the program" (Noble et al., 2007, p. 157). Several of the respondents commented that while enrolled in the program, they no longer felt

ostracized; recognizing that Early Entrance Program enabled them to interact with individuals much like themselves, highly-intelligent, goal-oriented students who understood and accepted one another (Noble et al., 2007). Furthermore when asked if they would support and/or encourage their own children to participate in Early Entrance Program, the majority of respondents said yes with none of the respondents from the Mature Early Entrance Program subgroup saying no to this question. Noble et al. (2007) asserted this is an important delineation to understand because since 1990, the Early Entrance Program incorporated additional resources in support of a student's academic and social success as part of the program which included intensive academic, career and psychological advising that may have positively influenced their social, career and academic development. Some participants in the program prior to 1990 felt that their age had a negative impact on them in some way, including but not limited to "being too young to make major career decisions, limited options for dating, too much freedom and too young to take full advantage of the programs and services offered at the University" (Noble et al., 2007, 158).

Researchers determined these participants found Early Entrance Program itself socially and academically challenging, "an environment of like-minded peers" which enabled them to make friendships easily (Noble et al., 2007, p. 159). However, some participants struggled with life outside Early Entrance Program indicating that their young age was problematic which in turn may have impacted their overall social development. It is in this aspect that Noble et al. (2003), found several gender differences, most notably that males struggled with establishing relationship outside the Early Entrance Program cohort, reporting a lower level of satisfaction in finding satisfying relationships today, many years beyond Early Entrance Program. As a result, several participants in the study recommended that Early Entrance Program assist and encourage

participants to make friends beyond the program specifically within the greater University community.

Recognizing that students who participate in the Early Entrance Program derive great benefits intellectually from participating in such a program, the researchers became keenly aware of the possible social implications of the program specifically for males, but caution the degree to which the data can be generalized to all students participating in early college programs (Noble et al., 2007). Furthermore the fact that the study was anonymous hindered the researchers' ability to follow-up with respondents about comments they had made and to reach out to those who had not responded at all. Overall, the study highlighted the positive impact early college programs can have on students intellectually but at the same time brings to the forefront the need for further inquiry on the impact such programs have on students' social and psychological development beyond the "protective" environment of the program particularly in the area of friendship and love.

### **Campus Engagement and Student Development**

Research indicates that direct engagement and socialization in a university community fosters a student's overall development and positively impacts academic success (Tinto, 1987, Astin, 1993, and Kraemer, 1997; Kuh & Gonyea, 2003; Pascarella & Terezini, 2005). Socialization occurs most often during campus activities, living on-campus, late-night study groups in the library and research labs, participating in intramural programs and simply hanging out in the student union (Tinto, 1987). Understanding that students who commute come to campus for a limited amount of time, the sphere of influence is well beyond the university community to include family, the neighborhood they reside and place of employment (Tinto, 1987). As a result, the social influences a commuter student experiences are often more a factor

in withdrawing from college versus persisting to degree completion. This is particularly relevant when working with high-risk, minority students from low-socioeconomic families. Studies indicate that for this particular population, social contact, both peer-to-peer and faculty interaction was a consistent theme in student self-assessment of one's academic and social success as well as the major influence in degree completion (Tinto, 1987, p. 79). Tinto's research in this area was further validated by Kuh and Gonyea (2003) who determined through an exploratory study, that libraries not only have an integral part to play in an institution's ability to accomplish its academic mission, but that students of color use the library as much or more than their counterparts (Kuh and Gonyea, 2003). Kuh and Gonyea (2003) speculated that for students of color, the college library may be perceived as a safe-haven where students of the same ethnicity can collaborate and support their peers academically and socially (p. 267). However, given the research in this area, it is prudent to understand how minority students, particularly Latinos select a college to attend and how this selection could be impacting their ability to be more engaged on a college campus and thus influencing degree completion.

According to a study conducted by Santiago and Cunningham (as cited by Muñiz, 2006), a primary reason for college-bound Latinos in selecting a college to attend is the proximity of the institution to the student's home. The researchers found that of those students who do reside on campus, 7% are Latino compared to 14% of all undergraduates combined (Santiago and Cunningham as cited by Muñiz, 2006). These studies support the findings in an earlier study conducted in 2004 by Pew Hispanic Center and Kaiser Family Foundation in which staying close to family was a major factor in obtaining a college degree. Furthermore Latino students are more likely to be first-generation students and although 95% of parents of Latino students recognize that it is very important for their children to go to college of which 54% recognize that

without a college degree, their children will experience little success, the parents themselves have not attended college and therefore are unable to provide the guidance for their students to be engaged in student activities outside the traditional classroom (Pew Hispanic Center and Kaiser Family Foundation, 2004). Lastly, according to Santiago and Cunningham (as cited by Muñiz, 2006), in general, families of Latino students contribute on average \$1,000 or less to their student's college tuition causing students to work when not in class, possibly preventing them from being as engaged as they would like on a college campus. The need to work was validated in an earlier study in which for Latino students was the reason for not completing a college degree (Pew Hispanic Center and Kaiser Family Foundation, 2004)

Tinto (1987) asserted that knowing that only 15-25 percent of withdrawals from an institution have to do with academic failure, it is important for us to understand the reasons why students voluntarily leave an institution. Tinto (1987) found that when a student voluntarily withdrew from an institution of higher education, it had everything to do with what happened once the student enters college rather than the experiences he/she had or factors influencing the student prior to enrollment in the institution. At the same time, Tinto (1987) theorizes that a student encounters three stages of departure, (separation, transition and incorporation), which in turn impact a students' ability to be socially and academically successful at an institution of higher education and complete a degree.

Separating at some level from a community or group from the past is the first stage in a student's transformation and adoption of the characteristics and norms of a higher education community that in turn, enables a student to be socially and academically successful (Tinto, 1987, p. 95). According to Tinto (1987) communities and/or groups from the past to include friends from high school, members of one's residential community and even family and although

this separation can vary in degree, the social norms, expectations and intellectual approach of these groups often differ from those necessary to obtain academic success in college. This is particularly challenging for students who do not reside on campus but commute daily to college and thus return home and interact with these communities. As a result, while the stress on students to disengage from previous communities is far less than those students who relocate to a college campus because they are residing on-campus, commuter students must make much more of an effort to socially immerse themselves in the college in order to enhance their learning and overall development (Tinto, 1987). Therefore, it is a student's response to the stressors of college life and the communities from which a student comes from that serves as a key indicator as to whether a student persists through his/her education (Tinto, 1987). At the same time, Tinto (1987) explains that a commuter student could find his/her experience in college not only less rewarding but also less motivating since the student could lack the extensive peer-to-peer and faculty interactions that residential students benefit from. Once this hurdle is overcome, incorporation into the institution is necessary (the final stage of departure) and most often takes the form of campus involvement. Students who involve themselves in intramural sports, student activities, clubs and organizations, and visits with faculty, staff and their peers either in offices or high-traffic areas such as the student union, will find themselves socially engaged and fully incorporated in the college community (Tinto, 1987). The social influences from institutional incorporation can positively impact the academic success and overall persistence towards a degree (Tinto, 1987).

Tinto's theory of departure was further validated in the Astin (1993) longitudinal study that showed that socialization and peer group interaction positively affected a student's critical thinking skills, cultural awareness, overall leadership development as well as academic

development. The study utilized eighty-two outcome measures, 150 student input measures and almost 200 environmental measures over a four year period involving 25,000 students (Astin, 1993, p. 4). Astin (1993) learned that the most powerful influence on an undergraduate student's personal and academic development is the peer group. As a result, students who choose not to reside on-campus or spend a great deal of time engaging in activity beyond the classroom, may miss out on these opportunities to not only connect with their peers but the University as a whole which in turn, may negatively impacts one's academic and social development. In addition, Astin (1993) analyzed the impact socioeconomic status had on a student's academic and social success and found that one's socioeconomic status had a strong effect on degree completion particularly for a bachelor degree. The research indicated that one's socioeconomic status does relate positively to some areas of overall satisfaction a student's has of his/her undergraduate experience; a willingness to re-enroll, overall GPA and the ability to pursue graduate school (Astin, 1993). Astin (1993) recommends that institutions will perform better if more attention is placed on pedagogy and the overall delivery system to support educational outcomes rather than on traditional formal structures. He further explains that if an institution focuses on educational outcomes, student and the institution will experience widespread benefits (Astin, 1993).

These studies raise the question as to whether the theory is applicable to racial minority students who in essence are being told to adapt to an environment that historically has been defined by a high, socioeconomic, Caucasian society. Kraemer (1997) studied whether these traditional models of academic and social integration as they relate to persistence were applicable to Hispanic students. Although the research was conducted with students attending a two-year college, the purpose of the research was to examine indicators of student's academic and social success, and therefore, these indicators could be utilized in other settings such as a



four year university (Kraemer, 1997). It is important to note that the students participating in the study attended an institution that had an open-door admission policy and allowed many of the initial courses to be taught in Spanish (Kraemer, 1997). Additionally, Kraemer (1997) recognized that the students in the study did not have to adapt to the campus community as an individual, leaving behind one's cultural identity, an argument against Tinto's theoretical departure model, but rather adapted as a group to a similar culture from where they came from. The presence of Hispanic faculty, staff and students and the use of the Spanish language at the institution challenged Tinto's traditional definition of social integration (Kraemer, 1997). Despite these differences, Kraemer (1997) determined three indicators that contributed to a Hispanic student's academic success and persistence: formal faculty-student interaction, informal faculty-student interaction and study behavior measured by the use of the campus library (Kraemer, 1997).

Kraemer's study reinforces current research in this area by the Pew Hispanic Center and Kaiser Family Foundation, (2004) and research conducted by Santiago and Cunningham (as cited by Muñiz, 2006) which found that in addition to the primary reason for college selection by Latinos being the proximity of the institution to the student's home, Latinos are half as likely as other groups to reside in on-campus housing. Furthermore, Santiago and Cunningham (as cited by Muñiz, 2006) determined that Latinos in general, are price-sensitive when it comes to the cost of higher education and are likely to attend colleges offering low tuition. Knowing that in general, families of Latino students contribute on average \$1,000 or less to their student's college tuition, the fees associated with residing on-campus in college residence halls is cost prohibitive for Latino students (Santiago and Cunningham, 2005 as cited by Muñiz, 2006).

Despite these factors, students living on campus have opportunities to engage with their peers on an emotional, social and intellectual level through a vast array of programs and services intentionally designed to engage students in the campus community which may benefit Latino students more academically and socially than their counterparts (Kuh, Kinzie, Schuh, Whitt and Associates, 2005). Kuh et al (2005) explains that students living on-campus receive academic and social support formally and informally from their peers, paraprofessionals such as resident advisors and professional such as faculty and staff, significantly contributing to academic and social success.

### **Identity Development amongst Young Adults**

Noted researcher, Erickson (1980) identified eight stages of development that are characterized by a particular conflict that Erickson argues must be resolved by an individual in order for the individual to move successfully to the next stage of development. According to Erickson (1980), resolving the basic conflict at each stage of development plays a major role in one's personality development and psychological skill development ensuring that an individual can deal with such life experiences as independence, social and academic demands, the world of work, intimacy and overall life fulfillment. It is Erickson's fifth and sixth stages of psychological development, Adolescence (often occurring between 12-18 years) and Young Adulthood (often occurring between 19-40 years) that provide particular insight into the personal identity and social development of students in the last two years of high school and the first two years of college; the years students are enrolled in the early college high schools program. According to Erickson (1980), it is during the fifth stage of development that youth are primarily concerned with how they appear to others; questioning how they can connect with earlier defined roles, those identified with as a child, with those identified with as an adolescent (p. 94). During

this stage of development, youth should have a sense of self and as a result achieve a sense of identity (Erickson, 1980). According to Erickson (1980), this stage of development is critical to an individual's ability to engage in intimate relationships later in life. Erickson (1980) explains that "the youth who is not sure of his identity shies away from interpersonal intimacy (Erickson's 6<sup>th</sup> stage of development); but the surer he becomes of himself, the more he seeks it in the form of friendship, combat, leadership, love and inspiration" (p. 101).

According to Erickson (1980) the 6<sup>th</sup> stage of development involves individuals engaging in relationships that allow for discussion of life plans, wishes, desires and expectations; deeply personal acknowledgements and expressions to another individual. Erickson (1980) often refers to this stage as ego identity which requires an individual to have gained certain skills and abilities during these stages so as to be prepared for full adulthood. Erickson states that these skills and abilities are "learned and practiced through religion, and in politics, in the economic order and in technology, in aristocratic living, and in the arts and sciences" (Erickson, 1980, p. 105).

It is important to note that Erickson placed a heavy emphasis not only on the proper sequence of the stages of development but the period of time in which an individual experiences the stage (Waterman, 1982). Recognizing that there can be extreme differences as to when an individual experiences a stage of development, Waterman (1982) states that Erickson intended for Stage Five, adolescence, to cover from puberty through the college years (p. 344). This is further supported by Waterman's extensive review of the research in which he concluded that the college years proved to be the most significant time for an individual to formulate one's identity. However, Waterman (1982) claims that there are antecedent conditions that can influence one's ability to form an identity including the extent to which an individual identifies with a parent, the

availability of a successful role model and the overall social expectations by family, one's peer group and schools (p. 345). Waterman determined after a review of the research that a college environment provided numerous opportunities for an individual to engage in diverse experiences that enabled one to explore, experience, understand and consequently formulate one's identity. Furthermore, Waterman (1982) found that although an individual's identity development can be influenced by the political landscape, each year of college can provide additional developmental insight ultimately yielding to a strong self identity in one's senior year.

Waterman's extensive review of the research further supports Erickson's theory of identity development in particular the movement from adolescence to adulthood as being progressive and that one's overall identity is heavily influenced and thus shaped during the college years (Waterman, 1982). The work of Erickson (1980) and Waterman (1982) further support the need for individuals to not only have access to higher education but to be provided experiences during the college years that allow one to explore and shape one's identity; a cornerstone to one's overall success in life.

In conclusion, it is important to note that more often than not, traditional indicators such as a student's grade point average and test scores are relied upon to determine a student's ability to succeed in college (Conley, 2007). However, high school and college are different, most notably in the relationship that exists between students and professors, the increase in the amount of homework, reading and research needed to pass the class and the expectation by professors for students to be engaged and motivated far beyond what was expected of them during high school (Conley, 2007). Therefore, traditional college readiness and college success indicators are not adequate in determining the success or failure of a college-bound student. Researchers have asserted that a student's level of engagement in high school, including a student's ability to

manage their time, self-manage and apply study skills can be attributed to the student's ability to be successful in college (Conley, 2007).

## **Chapter 3: Methodology**

### **Research Design**

Given the gaps in the existing research, this study seeks to clarify the outcomes that might be associated with students participating in early college high schools and the impact this type of program may have on a students' academic and social adjustment to a four-year, public, research university. Determining the most effective research design for understanding outcome associated with the research questions identified for this study, is a critical step in determining the most effective strategy of inquiry (Creswell, 2009). Given the desire not to be committed to one system or philosophy and reality, a pragmatic worldview, a mixed method study was originally designed for this study which involved the administration of a survey and conducting focus groups (Creswell, 2009). The desire to employ multiple methods of inquiry, survey and focus groups, would have provided the researcher "thick description" and valuable insight. However, over the course of the study, it became apparent that participants were not eager to partake in the focus groups which therefore resulted in the elimination of the focus groups entirely from the study.

Although two distinct populations were identified to participate in this study, only those who had attended an early college high school were invited to participate in the focus groups. The purpose of conducting the focus groups was to ask follow-up questions based on data collected from the survey in an attempt to better understand the academic and social adjustment during their first semester at a four-year, public, research institution of students who had attended early college high schools. Ten different days and a variety of times during the day were identified over a three week period to conduct the focus groups. Furthermore, the time of day selected to conduct the focus groups represented morning, afternoon and evening hours so as to

ensure there was a time available for students to participate given their class and/or work schedules. Additionally, in order for eligible participants to have easy access to the focus groups, a central, well known building at the institution where participants were attending school was identified as an ideal location for such an activity. Eligible participants received eight invitations over a four week period inviting them to participate in the study. These invitations were sent to students by the Vice President of Student Affairs at the time, so as to avoid coercion, along with four reminder emails, encouraging students to participate in the focus groups. Although the researcher is confident that the eligible participants received the email notifications, with several of the eligible participants calling the office to ask whether the time and date they were interested in attended was full, ultimately, students chose not to participate. Although unable to accurately determine why students did not participate, the researcher did hear from several eligible participants anecdotally, that it seemed odd that the Vice President for Student Affairs invited them to participate in a focus group that I, the researcher, was conducting. Given this feedback, perhaps the way in which students were invited to participate in the focus groups was problematic and caused eligible participants to question the credibility of this portion of the study. With this said, conducting a purely quantitative study will still enable the researcher to study the problem, explain a situation, all the while maintain objectivity (Creswell, 2009).

Ultimately, quantitative research allows for one to “test objective theories by examining the relationship among variables” (Creswell, 2009, p. 4). Given the nature of this study, it is believed that this approach is a viable one. Furthermore, employing a survey for the purpose of collecting data not only is a method that enables a researcher to collect data from many people at little or no cost, but it is also an instrument widely used in educational settings (Creswell, 2009)

For the purposes of this study, the survey was also sent electronically, allowing for increased efficiency and a reduction of time by the research to conduct the actual study. Overall, employing a survey for this study will allow the researcher to collect data from a sample that represents a population and that upon analysis of the data, determine some findings that can be generalized.

### **Survey Research**

Data collected through individual's responses to questions has proven a very popular and efficient way in which to conduct research (Ritter & Sue, 2007). Due to the rapid growth in the internet and the access to technology not only by researchers but by the populations they are studying, the use of online surveys has increased in recent years. These types of surveys are seen not only as efficient, practical and inexpensive but sensible in that they allow researchers to target particular groups of people (Ritter & Sue, 2007). However, despite these advantages, there are disadvantages and/or limitations to using online surveys. For example, the promise of anonymity can be questioned by respondents given the fact that email address are used to contact individuals to participate in a study. According to (Ritter & Sue, 2007), email responses are technically never truly anonymous so respondents may be skeptical of electronic survey offering anonymity. Therefore if a promise of anonymity is made to respondents, as was the case for this study, every reasonable step should be taken by the researcher that identifiable information is kept separate from individual responses. Additionally, if the inquiry involves incentives such as was the case in this study, information collected from participants who wish to receive an incentive should be stored separately from the results of the survey so that there is no correlation between the participant and the survey data collected.



In addition to preserving the anonymity of survey respondents, user-friendliness, visual appeal and the length of the survey are necessary factors to consider when utilizing this form of assessment. The reason respondents do not participate or complete a survey could be the result of the length of the survey, the content of the survey or even the visual appeal of the survey (Clarkberg & Einarson (n.d.). Research in this area indicates that a survey or questionnaire can emit signals that influence whether a respondent participates in a survey or completes an entire survey (Clarkberg and Einarson, n.d.). Additionally, a respondent's perception of how burdensome the survey may be is coupled with the length of the instrument itself (Clarkberg and Einarson, n.d.).

Lastly, according to Ritter and Sue (2007), "clear, short, unbiased questions should make-up the survey to avoid compromising the validity and reliability of the survey responses (p. 29)." One should avoid phrases or jargon that is unfamiliar to respondents as well as words or phrases that may bias or influence an answer (Ritter & Sue, 2007). Additionally, the use of a four-point rating scale so as to "eliminate a neutral answer, forcing respondents to agree or disagree with a statement" can be used to assist the researcher in categorizing respondent's answers either positively or negatively (Ritter & Sue, 2007, p. 32). However Ritter and Sue (2007) caution that employing this type of scale may in fact, frustrate respondents who truly feel neutral about a statement and thus skip or abandon the survey all together.

## **Participants**

The site of the study was The University of Texas at El Paso, a public, four year, research institution where the majority, (77%), of the students enrolled, are of Hispanic origin. At the time of the study, 22,749 students were enrolled at the institution, 84% of which are classified as undergraduates. For the purpose of this study, two distinct populations were identified to

participate in the study, all of whom were at least 18 years old. The first sample was comprised of students who enrolled and graduated from an early college high school in El Paso County and matriculated to The University of Texas at El Paso. This population entered the University with a minimum of 60 hours of academic coursework and were classified as juniors. At the time of the study, there were 354 students eligible to participate in the study. The students comprising this sample never “stopped out” of school and were awarded their high school diploma and most their Associate of Arts degree as well.

The second sample was comprised of students who matriculated to The University of Texas at El Paso the fall semester following the spring semester completion of high school and at the time of the study were classified as juniors, having completed 60 hours of coursework. Five hundred and forty-six students were eligible to participate in the study. Eligible participants attended school full-time, each long semester since starting at the institution. These students had received their high school diploma but not their Associates of Arts degree. Like the students who attended an early college high school, the students comprising the second sample, also never stopped out of school.

Due to the small size of both of the samples and the need to have a viable return from the survey, the decision was made to involve all participants in the study.

### **Survey Design**

Tinto (1987) asserted that a student must separate at some level from a community from the past in order to fully adopt the norms of higher education so as to be socially and academically successful while in college and upon graduation. At the same time, Erickson (1980) claimed that an individual will experience eight stages of development, each possessing a particular conflict that must be overcome in order to successfully move onto the next stage.

Specific to this research is the fifth and sixth stages of psychological development that according to Erickson (1980) are instrumental to an individual's identity development and consequently, the skills and abilities learned during these stages will prepare an individual for adulthood. Understanding Tinto's stages of departure and Erickson's stages of psychological development, one can clearly see that the years spent in college can have a profound impact on an individual's identity development and thus preparation for the world of work and adulthood in general.

In a more recent study conducted by Noble, Vaughan, Chan, Childers, Chow, Federow, and Higes (2007) of graduates from the Early Entrance Program at the University of Washington, it was found that some participants had difficulty forming either platonic or romantic relationships with the general student population at the University which may have impacted one's overall social development. In an attempt to assess the educational, work and relationship experiences while engaged in the Early Entrance Program and since graduation, the researchers created a 100-item questionnaire distributed to 211 alumni of the program who had graduated from college (Noble et al., 2007). Although the researchers cautioned the degree to which the data they collected could be generalized to all students participating in an early college entrance program, Noble et al. (2003) did gather some evidence of the possible social implications that an early college entrance program may have on students particularly, male students.

In addition to the instrument used in the Nobel et al., (2003) study, the National Survey of Student Engagement (NSSE) instrument also influenced the survey design. NSSE, conceptualized in 1998, piloted in 1999 and launched in 2000, is a self-report survey in which more than 1300 institutions of higher education have participated over the past 13 years NSSE, administered in the spring semester to freshman and seniors who were enrolled in the previous

semester, collects information about student participation in programs and the results providing an estimate on how students spend their time and what they gain from attending a four-year college or university (“National Survey,” 2013). The NSSE instrument collects 5 categories of information:

1) participation in dozens of educational purposeful activities; 2) institutional requirements and challenging nature of coursework; 3) perceptions of the college environment; 4) estimates of educational and personal growth since starting college; 5) background and demographic information (“National Survey,” 2013)

The survey items “represent empirically confirmed “good practices” in the undergraduate education” (“National Survey,” 2013). The data collected reflect behaviors by students and institutions that are associated with desired outcomes of a college education. Institutions are encouraged to use the data to identify aspects of their undergraduate education both academic and extra-curricular that can be improved to better support and/or educate their students. The results of the NSSE enable educators to understand their students better whether it is how they spend their time or how rigorous they perceive the curriculum to be.

Like the instrument utilized by Nobel et al. (2007), the National Survey of Student Engagement (NSSE) relies on self-reports and relying on this type of data is common practice especially when assessing undergraduate education. Kuh (2001) asserts that “some outcomes of interest cannot be measured by achievement tests” (p. 1). Over the years, researchers have examined the validity of instruments that have relied on self-reporting especially as it relates to the accuracy and truthfulness of the information being reported (Kuh, 2001). However, what was found was that people tend to report both accurately and truthfully about their past (Kuh,

2001). Kuh (2001) explains that the only exception to this is when questions are sensitive in nature or put the respondent in an embarrassing position.

Inquiries about whether self-reported use of time has also surfaced as they relate to the validity of these types of instruments. To this end, although studies indicate that estimates of time usage tend to be less accurate than entries in a diary, this particular threat to the validity of the instrument can be avoided by asking respondents about recent activities and providing a frame of reference such as the time period to be considered (Kuh, 2001). As a result of the extensive research as to the validity of self-reported instruments specifically the NSSE, a nationally recognized assessment of students success indicators, Kuh (2001) determined that five conditions must exist for self-report instruments to have an acceptable level of validity. These conditions include the following: 1) when the information requested is known to the respondents; 2) the questions are phrased clearly and unambiguously; 3) the questions refer to recent activities; 4) the respondents think that the questions merit a serious and thoughtful response and 5) answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways (Kuh, 2001).

All of these conditions were taken into consideration when developing the National Survey of Student Engagement. Additionally, due to how the survey is administered, who the survey is administered too, the type of questions asked, the timeline being of the recent past and the format for responses, a simple rating scale, further supports not only the validity of the instrument but credibility as well (Kuh, 2001). Furthermore, Kuh (2001) noted that many of the questions found in the NSSE have been used in several other institutional based-programs and questionnaires nationally further adding credibility to the instrument itself.

However, it should be noted that despite Kuh's assessment of the validity of the NSSE instrument in so far as the accuracy and truthfulness of the information being self-reported, researchers such as Campbell & Cabrera (2011) question the "extent to which NSSE benchmarks are a universal tool for appraising institutional quality and whether they predict such student outcomes as GPA" (p. 97). These researchers came to this conclusion after analyzing the 2009 NSSE data pertaining to large, public research institutions, specifically, non-transfer students who were seniors, utilizing Confirmatory Factor Analysis and Structural Equation Modeling. (Campbell & Cabrera , 2011). Although this study focused entirely on NSSE data from one large, research institution and therefore the results cannot be generalized to other similar institutions, the results of the study indicate that in terms of validity, "the model linking the five benchmarks with GPA represented a poor fit for data" (Campbell & Cabrera, 2011, p. 95). Furthermore, in terms of reliability, Campbell & Cabrera (2011) found that the benchmark, Enriching Educational Experiences, to be the least reliable benchmark amongst all NSSE benchmarks as a predictor of student success outcomes. However, it is important to note that an additional limitation of the research conducted by Campbell & Cabrera is the fact that the study only included non-transfer seniors. Therefore, if other populations had been included in the study such as transfer students, often a large group of students, results of this study could have been different (Campbell & Cabrera, 2011).

Kuh's assessment of the NSSE, prior research conducted by Noble et al. (2007) as well as the theoretical framework of Tinto (1987, 1988) and Erickson (1980) provided the foundation, support, and credibility for moving forward with a self-report instrument as well as using many of the NSSE questions for this research and line of inquiry.

## **Instrument**

Although some research has been conducted on the financial benefit of early college high school programs, including the high level of academic preparation students acquire in order to persist through college, very little research exists about a student's academic and social adjustment to a four-year, public, research institution as a result of enrolling in early college high schools. Questions such as does the schedule and/or curriculum of early college high schools allow students to gain the out-of-classroom activities that research indicates as critical to a college student's overall development and success have begun to be asked and therefore need to be answered.

The survey developed for this study (Appendix B) focused on students' assessment of their academic and social adjustment to a four-year, public, research institution and included questions pertaining to the activities they were involved in while participating in an early college high school or traditional high school as well as questions pertaining to their demographic profile. The survey design was heavily influenced by the theoretical framework of Vincent Tinto (1987, 1988) and Erick Erickson (1980), research conducted by Noble, Vaughan, Chan, Childers, Chow, Federow and Highs (2007) and the National Survey on Student Engagement (NSSE) which since 2000 has assessed the extent to which students engage in activities such as interacting with professors, participate in a student organization or service-learning project, reside on campus, and/or utilize study skills, to name a few, influence their personal and academic development while in college.

As a result, a 104 question survey was developed that focused on respondents' assessment of their academic and social adjustment while in high school and during their first full semester at the four-year, public, research institution. Participants were asked demographic

information such as their gender, ethnicity and current living arrangements as well as Likert-like items that discouraged neutral answers such as “did you work harder than you thought you could to meet instructor’s standards and expectation?” or “did you participate in community-based projects outside of class?” The survey was electronically sent to participants through CampusLabs and in an effort to avoid coercion due to the researcher’s position at the institution, the survey was sent to participants from the Vice President for Student Affairs at the time of the study.

The instrument itself is broken down into 5 main categories, 1) demographics; 2) academic adjustment; 3) social adjustment; 4) preparation for the world of work and 5) general. Other than the demographic section, each of the four other sections were grouped by what students experienced during high school, what their perception of things would be prior to actually attending classes at the four-year, public institution and what the students actually experienced once enrolled at the institution during their first semester. Students who participated in the survey were eligible to win a \$25 gift card to a local eatery. Of those who participated in the survey, three respondents from each sample were randomly selected to receive the gift cards.

The survey itself was developed with the insight of notable experts in the area of assessment including those from The University of Texas at El Paso’s Center for Institutional Research, Planning and Evaluation (CIERP) as well as consultants from CampusLabs. Once developed, the instrument was reviewed by professors and researchers in higher education and highly regarded student affairs practitioners, all of whom ascertained that the survey was a reliable and sound instrument for the purposes of this level of inquiry. A decision was made not to pilot-test the instrument due to the small sample populations and because the questions in the survey had been tested through previous instruments and had proved reliable and credible.



Eligible participants were sent five notifications via email, over an eight week period, inviting them to participate in the study. These invitations were sent by the Vice President of Students Affairs so as to prevent possible coercion by the researcher. The software utilized by the researcher to facilitate the survey enabled these reminders/notifications to be sent only to those eligible participants who had not already completed the survey.

### **Data Collection and Analysis**

The administration and collection of data was conducted through the software, Baseline, a robust assessment module operated by CampusLabs. CampusLabs is a company specializing in software development for assessment in higher education that the Division of Student Affairs at The University of Texas at El Paso (UTEP) utilizes. Formal contracts have been signed with CampusLabs and UTEP which includes all required security clearances. Baseline assigns a numerical code to each participant's email address so as to avoid duplicate responses and to allow for the internal mass-mailing system to function properly. Nevertheless, the confidentiality of all survey data will be maintained by only reporting results in aggregate. The security of the Campus Labs Baseline system has already been highly vetted on UTEP's campus. All data will be stored on the Campus Labs Baseline reporting site and will only be accessible through a unique username and password. Campus Labs has implemented various security measures at the application, network, and physical level to ensure that data will not be compromised. At the application level, several security measures and coding standards are in place such as code to guard against common hacking techniques, rules related to strength of passwords, and staying up-to-date on all security and release updates. Protection at the network level includes features such as dual firewalls, SSL encryption and 24/7 monitoring. Campus Labs

servers are housed within a Class a Data Center, compliant with TIA standards. The servers are always staffed, have three-tiered access points, and 24/7 camera surveillance.

As a result of the researcher's role as the Associate Vice President and Dean of Students in the Division of Affairs, permission was granted to use the CampusLabs software for the development, administration and data collection of the survey. The survey was administered over an eight-week period with several reminder emails being sent to eligible participants during this time. In order to preserve the integrity of the instrument and ensure no bias due to the job responsibilities of the researcher, the Vice President for Student Affairs at the time to the study, sent the request to participate in the research study as well as all reminder emails.

Informed consent was obtained from all participants prior to individuals taking the survey. While there was no direct monetary compensation for participants in the study, individuals who completed the survey were entered into a drawing for one of three gift cards. Upon entering the survey platform, individuals were asked to review the informed consent and determine whether they voluntarily agree to participate in the research study. If individuals agreed to take part in the study, they continued with the survey.

In addition to information obtained from the survey, data was received from the Center for Institutional Research, Assessment and Evaluation pertaining to the eligible participants for both samples of students. This information contained the name, email address, high school, cumulative grade point average and number of hours completed at the time of the study. This information was used to determine demographic profile information for both samples of students as well as to invite eligible participants to participate in the study. This information was passcode protected and housed on a secure server and could only be accessed by the researcher.

This study received approval by The University of Texas at El Paso Institutional Review Board on August 29, 2012 (Appendix A).

### **Analysis of the Data**

The quantitative data gathered as a result of the survey was summarized initially using descriptive statistics in an effort to determine differences and similarities between the two sample populations. The intent by the researcher was to describe what the data shows and not necessarily reach a conclusion or make inferences from the data to more general conditions. Furthermore, descriptive statistics will enable the researcher to simplify a large amount of data in a sensible way. With this said, there is an understanding that by describing large sets of data with a single indicator, there is a risk of distorting the original data and/or losing a level of detail. For example when analyzing the cumulative grade point averages of the students involved in the study using descriptive statistics, the researcher is unable to determine whether the GPA is a result of being enrolled in easy versus difficult courses or even whether the courses represent the major they are pursuing at the four-year, public institution. Despite these limitations and given the limited research on the academic and social adjustment during the first semester at the four-year, public, research institution of students who attended an early college high school, the intent of this study is to provide a summary that may lend itself to comparisons with other similar groups of students entering college early. Individual values or ranges of values are described with a frequency distribution and in some cases, variables were grouped into categories (i.e. demographics, academic adjustment and social adjustment) so as to make a comparison categorically between students who attended an early college high school and those who did not.

However, given the frequency in which respondents from both populations performed certain activities and the desire to determine whether the level of activity influenced a student's

academic and social adjustment during the first semester at the four-year, research public institution, a selected t-test were also conducted to determine whether the means of the two samples for certain activities were statistically different.

The Statistical Package for Social Sciences (SPSS) was used for data analysis. The data collected from the web-based service, CampusLabs, was exported to SPSS for the data analysis. By comparing students who attended an early college high school and entered the four-year, public, research institution as juniors to students who attended a traditional high school and are currently juniors, the researcher will be able to determine, despite the students' age difference, whether students who enrolled in an early college high school face similar transitional challenges academically and socially as students who did not participate in an early college high school.

### **Limitations of Study**

There are a number of limitations that affect the degree to which data from this study can be generalized to all students who transition to a four-year, public, research institution from an early college high school. First, the parameters of this study were such that only those students who matriculated to a particular four-year, public, research institution were invited to participate in the study. Secondly, although comparing similarities and differences with regard to academic and social adjustment during the first semester of enrollment at the four-year, public, research institution, between two distinct samples, yielded data in a general sense, the lack of exploring gender differences within these samples did not allow a more comprehensive data analysis that may have alluded to gender disparities in academic and social adjustment. Another limitation of the study was the lack of comparison between the data collected from respondents and its relevance to the specific early college high school in which the respondent matriculated. By conducting this type of comparison, the researcher could have assessed the degree to which

and/or trends associated with specific schools and the preparation of students from these schools for adjusting academically and socially to the four-year, public, research institution.

In addition to the above limitations, the anonymous nature of the study, prevented the researcher from contacting respondents to understand more fully the reason for not completing the survey instrument and thus possibly yielding a higher response rate overall. Conducting individual interviews and/or focus groups would have added a more in-depth understanding of the academic and social adjustment students who attended an early college high school must make during their first semester at the four-year, public, research institution.

Lastly, it is important to note that some respondents in each sample, did not answer all questions in the survey. For the sample ECHS, 93% of respondents answered all questions on the survey and for the sample labeled Juniors, 84% of respondents answered all survey questions. For both samples, those who did not complete the survey stopped answering questions at number seventy-one. As noted earlier when discussing the methodology for this study, the reason respondents do not participate or complete a survey could be the result of the length of the survey, the content of the survey or even the visual appeal of the survey (Clarkberg & Einarson (n.d.). Upon reviewing the on-line survey and the questions that were asked from number 71 onward including the overall length of the survey, the researcher is unable to determine the specific reason for respondents not completing the entire survey.

Furthermore, the instrument design and subsequent web layout gave no indication that the survey had come to an end and the questions asked from number 71 onward were not highly sensitive in nature. There is a possibility however that the respondents deemed the instrument too long and experienced survey fatigue at Question 71 therefore influencing their decision to stop participating in the study. Unfortunately due to the anonymity of the study, the researcher

was unable to determine the true cause for this phenomenon without contacting individual respondents.

## **Chapter 4: Findings and Discussion**

The purpose of this study was to analyze the similarities and differences in the academic and social adjustment of students who attended in an early college high school and matriculated to a four-year, public, research institution compared to and students who attended a traditional high school. Given the nature of the questions asked, the length of the survey and all that students in general, must juggle each day as they pursue their academics, the number of students who chose to participate in the study was impressive. Their willingness to answer the questions posed to them with the hope that their feedback would help other students successfully transition to the institution was refreshing. This chapter summarizes and discusses the findings from the survey administered to the two samples. The results of the survey and subsequent discussion are organized in the following manner, a) demographics of participants, b) academic adjustment to the institution and c) social adjustment to the institution. Descriptive statistics were used to analyze most of the results of the study. Percentage data is presented that may not be statistically significant, except when noted that inferential tests were conducted.

The research questions this study attempted to answer were:

1. What is the academic adjustment of students who participated in an early college high school and matriculated to The University of Texas at El Paso (UTEP) compared to students who did not participated in an early college high school program and matriculated to UTEP after their senior year of a traditional high school?
2. What is the social adjustment of students who participated in an early college high school and matriculated to The University of Texas at El Paso (UTEP) compared to students who did not participated in an early college high school program and matriculated to UTEP after their senior year of a traditional high school?

## **Demographics of Participants**

Two samples were identified to participate in the study, in which all eligible participants were at least 18 years old. The first sample was comprised of students who enrolled and completed an early college high school program in El Paso County and matriculated to The University of Texas at El Paso. At the time of the study, 354 students were eligible to participate in the study, 58% female and 42% male. Eligible students represented four early college high schools in El Paso County; 1) Mission Early College High School, 56%, 2) Valle Verde Early College High School, 25%, 3) Transmountain Early College High School, 12%, and 4) Northwest Early College High School, 7%. These students entered the four-year, public institution with a minimum of 60 hours of academic coursework and were classified as juniors academically. For the purpose of sharing the findings, this sample is labeled as ECHS.

The second sample is comprised of students who enrolled and completed high school in El Paso County in a traditional manner and matriculated to the four-year, public, research institution and were classified as juniors at the time of the study. For the purpose of sharing the findings, this population is labeled as juniors. Five hundred and forty-six students were eligible to participate, 56% female and 44 % male, representing 29 high schools. A complete list of high schools representing this sample population can be found in Appendix C.

Table 4.1 outlines key demographic information pertaining to both samples. As noted in section 1 of Table 4.1, of the 354 ECHS students eligible to participate in the study, 112 (71%) female, 29% male, chose to do so, a response rate of 32%. Of the 546 junior students eligible to participate, 164 (69%) female and 31% male, chose to do so, a 32% response rate. Additionally, the majority of respondents in both samples, 92% ECHS and 86% Juniors, self-identified as being Hispanic as noted in Section 2 of Table 4.1. The fact that the majority of ECHS



respondents self-identified as Hispanic/Latino is a significant data point for many reasons. First, as outlined in the review of literature, Latinos are the fastest growing population in the United States and yet academically, further behind than any other ethnic group (Gandara & Contreras, 2009). As a result, having a large percentage of ECHS respondents self-identify as Hispanic/Latino serves as a key indicator of the positive impact early college high schools are having on providing access to higher education for minority students. (Web and Mayka, 2011; A Portrait of Numbers, 2010). Furthermore, as noted in the review of literature, early college high schools are designed to permit students, particularly minority students, to obtain a high school degree while completing the first two years of college without paying tuition, reducing time to degree completion and attempting to close the gap between students from economically disadvantaged families and those from more affluent ones (Pennington, 2004). The fact that 92% of ECHS respondents identified as Hispanic/Latino, serves as an indicator of success in so far as the design and mission these types of high schools.

In addition to demographic data related to gender and ethnicity, respondents were asked about their living arrangements at the time of the study (Section 3 of Table 4.1). Overall, the majority of respondents from both samples, 92% ECHS and 88% Juniors, resided off-campus with their parents. These data reflect

previous research in this area by the Pew Hispanic Center and Kaiser Family Foundation, (2004) and research conducted by Santiago and Cunningham (as cited by Muñiz, 2006) which found that in addition to the primary reason for college selection by Latinos being the proximity of the institution to the student's home, Latinos are half as likely as other groups to reside in on-campus housing. Furthermore, Santiago and Cunningham (as cited by Muñiz, 2006) determined that Latinos in general, are price-sensitive when it comes to the cost of higher

education and are likely to attend colleges offering low tuition. Knowing that in general, families of Latino students contribute on average \$1,000 or less to their student's college tuition, the fees associated with residing on-campus in college residence halls is cost prohibitive for Latino students (Santiago and Cunningham, 2005 as cited by Muñiz, 2006).

Given the fact that the majority of ECHS respondents chose not to live on-campus may also impact their ability to be engaged in the campus community at the four-year, public, research institution. As discussed in the review of literature, separating at some level from a community or group from the past is the first stage in a student's transformation (Tinto, 1987). According to Tinto (1987), this separation is necessary in order to adopt the characteristics and norms of a higher education community that in turn, enables a student to be socially and academically successful. Furthermore, students living on campus have opportunities to engage with their peers on an emotional, social and intellectual level through a vast array of programs and services intentionally designed to engage students in the campus community (Kuh, et al., 2005). Kuh et al. (2005) explain that students living on-campus receive academic and social support formally and informally from their peers, paraprofessionals such as resident advisors and professional such as faculty and staff, significantly contributing to academic and social success.

Table 4.1: Demographic Profile

	<b>Type of Student</b>	
	<b>ECHS</b> <i>N=112</i>	<b>Junior</b> <i>N=164</i>
<b>Gender</b>		
Female	79 (71%)	113 (69%)
Male	33 (29%)	51 (31%)
<b>Ethnicity</b>		
Hispanic	104 (92%)	143 (86%)
White	3 (3%)	9 (5%)
Black	2 (2%)	1 (1%)
Asian American	1 (1%)	1 (1%)
International – Mexican National	1 (1%)	1 (1%)
International – Other	1 (1%)	1 (1%)
Native American	0 (0%)	1 (1%)
Chose Not to Respond	0 (0%)	7 (4%)
<b>Living Arrangements</b>		
Off Campus With Parents	104 (92%)	144 (88%)
Off Campus with Other Family	3 (3%)	4 (2%)
On Campus	3 (3%)	12 (7%)
Off Campus with Other(s)	1 (1%)	0 (0%)
Off Campus, Independently	1 (1%)	4 (1%)

In addition to asking about one's gender, ethnicity and living arrangements, respondents were asked what academic major they were pursuing at the time of the study. A total of 54 majors were identified on behalf of the respondents between the two samples; ECHS students were pursuing 41 different majors and Juniors pursuing 44 different majors. Respondents' majors, classified by College/School, can be found in Appendix D. Although the specific majors identified by the respondents differed slightly between the samples, there are some noticeable similarities and differences between the groups themselves and the four-year, public institution where they were enrolled at the time of the study. With both samples, the majority of students were pursuing majors administered in the College of Liberal Arts, 31% of ECHS students and 28% of juniors. The fact that the majority of students of both samples are pursuing majors in the

College of Liberal Arts is not out of the ordinary since this is the largest College at the four-year, public, research institution and is also in line with the institution's yearly demographic profile of its entire student population ("Facts," 2013). However the second largest percentage of majors being pursued by respondents of both samples fall within the College of Science which although contrary to the four-year, public institution's demographic profile (Fast Facts, 2013), is encouraging knowing that Latino's account for only 7% of the STEM labor force in the United States ("Bureau of Labor Statistics," 2012).

Although unable to substantiate why a large number of respondents from both samples are pursuing majors associated with the College of Science, upon further inquiry of the ECHS sample, 68% of the respondents eligible to participate in the study matriculated from an early college high school that emphasized a science and math curriculum and offered Associate Degrees in the areas of math and science. The encouragement and/or support of math and science at these schools may have influenced respondents of the ECHS sample to pursue science and math majors at the four-year, public, research institution. Research also indicates that retention of minority students in the science, engineering and math fields depends on enhancing the student's interest in science, the ability for the student to think critically and connections formed between students who are motivated to pursue a degree in these fields (Bonous-Hammarth, 2000).

The scholarly inquiry of Bonous-Hammarth (2000), supports the earlier research by Tinto (1993) who found that students overall, must feel a sense of belonging both academically and socially in college and factors such as faculty interaction, student engagement on-campus and relationships with peers highly influence Latinos regardless of their academic major. The research in this area is particularly intriguing given the fact that 23% of ECHS respondents

indicated that it would take them more than two years once enrolled at the four-year, public, research institution to obtain their degree because 31% of the 23% have changed or intend to change their major, adding more coursework. This outcome may also be linked to the student's lack of maturity and/or relevant, hands-on experience to determine a major, questions not addressed through this study but should be asked in future studies.

### **Academic Adjustment to the Institution**

In order to determine the academic adjustment of students who participated in an early college high school program and matriculated to a four-year, public, research institution with students who did not participate in an early college high school and matriculated to the same institution, a series of questions was asked of all respondents in order to gauge a student's level of comfort with working with peers in an academic setting, utilizing academic resources, interacting with faculty, and applying study skills. In so far as interaction with peers in the classroom and outside of the classroom, respondents were asked how often they had worked on projects with students during class as well as outside of class. The data suggests (as shown in Table 4.2, Section 1) that ECHS students worked with students on projects in class more often in high school, (66%) than they had during their first semester at the four-year, public, research institution, (38%) . Although the majority of respondents of both samples worked with other students on projects in class at least on occasion during both periods of time, the degree to which this interaction took place was more consistent between high school and the four-year, public institution, for students who did not participate in an early college high school program, Juniors, than those who did, (ECHS respondents). When asked the degree to which respondents worked with peers on assignments outside of class, although ECHS respondents performed this task more often in high school, 51%, than they did during the first semester at the institution, 42%,

ECHS respondents performed this type of activity more often than respondents in the Junior sample did during their first semester at the institution (Table 4.2, section 2). Furthermore, 9% ECHS respondents never worked with a fellow student on an assignment outside of class.

Respondents were also asked how often they had worked harder than they thought they could to meet instructor's expectations. As noted in Table 4.2, section 3, the data indicates that the degree to which respondents of the ECHS sample experienced this activity during high school, 44%, was fairly consistent with their experience in college, 43%, with only 2% during high school and 1% in college of ECHS respondents never working harder than they thought to meet an instructor's expectations. However, respondents from the Junior sample indicated a noticeable increase 25% in high school to 45% during the first semester at the institution as often having to work harder than they thought they could to meet instructor's expectations. Upon interpreting these data, it would seem that students enrolled in an early college high school experience a high level of academic rigor, preparing them for having to work hard at a four-year institution thus supporting the scholarly inquiry of Hoffman, Vargas and Santos (2008) as noted in the review of literature.

Table 4.2: Academic Adjustment from High School to College

	<b>Type of Student</b>			
	ECHS <i>N=109</i>		Juniors <i>N=158</i>	
	H. S	College	H.S	College
<b>Worked with students on projects during class</b>				
Often	72 (66%)	38 (35%)	60 (38%)	60 (38%)
Rarely/Occasionally	35 (32%)	62 (57%)	97 (61%)	95 (60%)
Never	2 (2%)	9 (8%)	1 (1%)	3 (2%)
<b>Worked with classmate on assignment outside class</b>				
Often	55 (51%)	46 (42%)	36 (23%)	58 (37%)
Rarely/Occasionally	51 (47%)	49 (45%)	108 (68%)	95 (60%)
Never	3 (2%)	14 (13%)	14 (9%)	5 (3%)
<b>Worked harder than you thought you could to meet instructor's expectations</b>				
Often	48 (44%)	47 (43%)	40 (25%)	70 (44%)
Rarely/Occasionally	59 (54%)	61 (56%)	99 (63%)	81 (51%)
Never	2 (2%)	1 (1%)	19 (12%)	7 (4%)

In an effort to further understand the academic adjustment of ECHS students compared to Juniors, questions were also asked that pertained to the respondents' perception of their academic preparation for taking classes at the institution as well as their assessment of what actually occurred during their first semester and the institution. To this end, 95% of ECHS respondents compared to 80% Juniors agreed or strongly agreed that they were well prepared for taking classes and 94% of ECHS respondents compared to 91% of Juniors expected to make at least a B average (3.0). However, after attending the institution for one semester, 39% of ECHS respondents and 37% of Juniors found it difficult to earn good grades. To some degree these figures reflect the institutional data collected by the Center for Institutional Research, Planning and Evaluation (CIERP) and provided to the researcher which reveals that of all eligible respondents for the study, 39% of ECHS compared to 64% of Juniors had a cumulative GPA of 3.0 or higher at the time of study.

As noted in the review of the literature, more often than not, traditional indicators such as a student's grade point average and test scores are relied upon to determine a student's ability to succeed in college (Conley, 2007). However, high school and college are different, most notably in the relationship that exists between students and professors, the increase in the amount of homework, reading and research needed to pass the class, and the expectation by professors for students to be engaged and motivated far beyond what was expected of them during high school (Conley, 2007). Therefore, traditional college readiness and college success indicators are not adequate in determining the success or failure of a college-bound student. Researchers have asserted that a student's level of engagement in high school, including a student's ability to manage their time, self-manage and apply study skills can be attributed to the student's ability to be successful in college (Conley, 2007).

Understanding this perspective, questions that were posed to both samples to assess their academic adjustment to the four-year public, research institution included whether students were comfortable with asking questions in class, asking instructors questions outside class, applying study skills to class assignments including one's comfort level with managing his or her time. Data pertaining to these factors can be found in Table 4.3. In general, the data collected from these questions point to ECHS students, being more comfortable performing or applying these skills in their first, full semester at the four-year, public, research institution than the Juniors.

For example, ECHS respondents were comfortable or very comfortable 75% of the time asking questions of instructors in class and 82% comfortable or very comfortable doing so out of class. In addition, as noted in Table 4.3, section 5, ECHS respondents were more comfortable applying study skills to class assignments than Juniors. Yet, 20% of ECHS respondents indicated that they were uncomfortable or very uncomfortable managing their time. Furthermore, when



asked about how comfortable respondents were with using the library for research, 12% of the ECHS respondents compared to 18% of the Juniors were either uncomfortable or very uncomfortable doing so (Table 4.3, section 2). Knowing that 88% of ECHS respondents are comfortable or very comfortable using the library for research supports the earlier exploratory study by Kuh and Gonyea (2003) who determined that libraries not only have an integral part to play in an institution's ability to accomplish its academic mission but that students of color use the library as much or more than their counterparts (Kuh and Gonyea, 2003). Kuh and Gonyea (2003) speculated that for students of color "the college library may be perceived as a safe-haven where students of the same ethnicity can collaborate and support their peers academically and socially" (p. 267).

Table 4.3: Academic Adjustment at Four-Year, Public Institution

	<b>Type of Student</b>	
	ECHS <i>N=109</i>	Juniors <i>N=158</i>
<b>Difficult to earn good grades</b>		
Agree/Strongly	42 (39%)	58 (37%)
Disagree/Strongly	67 (61%)	100 (63%)
<b>Thinking critically, analyzing, solving problems</b>		
Comfortable/Very	102 (94%)	144 (91%)
Uncomfortable/Very	7 (6%)	14 (9%)
<b>Used the library for research</b>		
Comfortable/Very	96 (88%)	130 (82%)
Uncomfortable/Very	13 (12%)	28 (18%)
<b>Asking questions in class</b>		
Comfortable/Very	82 (75%)	101 (64%)
Uncomfortable/Very	27 (25%)	57 (36%)
<b>Asking instructors questions outside class</b>		
Comfortable/Very	89 (82%)	104 (66%)
Uncomfortable/Very	20 (18%)	54 (34%)
<b>Applying study skills to class assignments</b>		
Comfortable/Very	106 (97%)	139 (88%)
Uncomfortable/Very	3 (3%)	19 (12%)
<b>Managing time</b>		
Comfortable/Very	87 (80%)	120 (76%)
Uncomfortable/Very	22 (20%)	38 (24%)

In order to identify statistical differences, t-tests were conducted on the responses of ECHS and Juniors for selected questions. These questions included those that were analyzed initially using frequencies and addressed the student's academic adjustment to the four-year, public, research institution, in relation to what had occurred during high school. Specific questions in which t-tests were conducted were, whether respondents worked with students on projects during class, worked with students on projects outside of class and whether students worked harder than they thought they could to meet instructor's expectations. These questions

were selected because they are included in two NSSE's benchmarks of Effective Educational Practice, Level of Academic Challenge and Active and Collaborative Learning, activities contributing to a student's overall learning and personal development. The results of the t-test analysis as noted in Table 4.4, indicated that there were no statistical differences ( $p < .05$ ) between ECHS and Juniors on any of the identified academic activities asked of respondents for the specific questions identified.

Table 4.4: *t*-test Results for Academic Adjustment during First Full Semester at Institution

	Samples	N	Mean	SD	<i>t</i> value	<i>p</i> value
Worked with students on projects during class	ECHS	109	2.98	.943	-1.662	.098
	Juniors	158	3.46	.786	-1.608	.109
Worked with classmate on assignment outside class	ECHS	109	3.00	1.054	-.876	.382
	Juniors	158	3.10	.831	-.839	.402
Worked harder than you thought you could to meet instructor's expectations	ECHS	109	3.31	.690	.866	.387
	Juniors	158	3.23	.836	.897	.371

\*Significance at  $p=0.05$

### Social Adjustment to the Institution

Respondents were asked about social adjustment during their first semester at the four-year, public, research institution. These activities for which feedback was requested, not only represent five distinct ways in which students can become engaged in the campus community but are also widely referenced in research as activities that support student retention, academic success and preparation for the world of work (Kuh, 2001; Astin, 1993; Tinto, 1987). To this end, as noted in Table 4.5, section 1, participation in community service as part of a course (service learning), 83% of ECHS respondents compared to 73% of Junior respondents had participated in some sort of community service as part of a class during the first semester at the four-year, public, research institution, with ECHS respondents doing so more often than Junior

respondents. Yet during the same time period, 19% of ECHS respondents compared to 37% of Junior respondents never participating in this type of service activity at all (Table 1.4, section 2). Also, 51% ECHS respondents had occasionally or rarely participated in fitness activities during their first semester at the institution and 56% of Junior respondents stated they had participated at the same level. The participation in student clubs suggests that 43% of respondents from the ECHS sample, occasionally or rarely engaged in student organizations while, 33% Junior respondents stated they had never participated in a student club during their first semester at the public institution. Lastly, 67% ECHS respondents sought an internship at some point during their first semester at the institution compared to 74% of the respondents from the Junior sample during the same time period. Furthermore, the fact that so few Juniors pursued an internship while in high school is not particularly unusual since it is widely recognized and encouraged for students to engage in this activity while in college. However, the fact that 60% of ECHS students sought an internship during the same period of time could be attributed to the curriculum and/or environment of the early college high school from which they matriculated.

Numerous studies indicate that the time and level of commitment students give towards activities that are educationally purposeful, is the best predictor of student success while in college (Kuh et al., 2005; Astin, 1993; Tinto 1993, 1983). Additionally, service learning and internships are deemed as high-impact educational practices, contributing to a student's cumulative learning (Kuh, 2008). As a result, although less engaged college as they were while enrolled in the early college high school, the data indicate as highlighted in Table 4.5, that ECHS respondents were only slightly less engaged overall compared to Junior respondents during their first semester at the four-year, public, research institution.

With this said and understanding that internships provide students hands-on experiential learning, the fact that 33% ECHS respondents compared to 26% of Junior respondents did not pursue an internship opportunity during their first full semester at the institution, could be perceived as possibly negatively impacting a student's overall success in college. However, knowing that high-impact experiences like internships require considerable time and effort, respondents from the ECHS sample could have decided to pursue an internship in a later semester rather than during their very first semester at the institution (Kuh, 2008). Research does not indicate that the benefits of an internship can only be derived during the first, full semester at a public institution but rather that student engagement of this kind at some point during a student's college career is beneficial academically and professionally (Kuh, 2001 & 2008; Astin, 1993; Tinto, 1987). Coincidentally, while enrolled in the first semester of the public, research institution, 35% ECHS respondents compared to 18% of Juniors had also never learned how to write or improve their resume from a career counselor which could be a contributing factor to not pursuing an internship during this period of time.

Table 4.5: Social Adjustment High School/College

	<b>Type of Student</b>			
	<b>ECHS</b> <i>N=109</i>		<b>Juniors</b> <i>N=158</i>	
	H. S.	College	H.S.	College
<b>Participated in community service as part of a class</b>				
Often	33 (30%)	12 (11%)	32 (20%)	26 (17%)
Rare/y/Occasionally	65 (60%)	55 (50%)	94 (60%)	89 (56%)
Never	11 (10%)	42 (39%)	32 (20%)	43 (27%)
<b>Participated in community service outside classroom</b>				
Often	39 (36%)	21 (19%)	45 (28%)	37 (23%)
Rarely/Occasionally	60 (55%)	54 (50%)	82 (52%)	89 (56%)
Never	10 (9%)	34 (31%)	31 (20%)	32 (21%)
	<b>ECHS</b> <i>N=107</i>		<b>Juniors</b> <i>N=144</i>	
	H. S.	College	H. S.	College
<b>Exercised, participated in fitness activities</b>				
Often	61 (57%)	34 (32%)	87 (60%)	48 (33%)
Rarely/Occasionally	45 (42%)	55 (51%)	54 (38%)	81 (56%)
Never	1 (1%)	18 (17%)	3 (2%)	15 (11%)
<b>Participated in student club</b>				
Often	72 (67%)	24 (22%)	94 (65%)	51 (35%)
Rarely/Occasionally	33 (31%)	46 (43%)	38 (26%)	46 (32%)
Never	2 (2%)	37 (35%)	12 (9%)	47 (33%)
<b>Sought an internship</b>				
Often	18 (17%)	26 (24%)	9 (6%)	46 (32%)
Occasionally/Rarely	46 (43%)	46 (43%)	54 (38%)	60 (42%)
Never	43 (40%)	35 (33%)	81 (56%)	38 (26%)

Moreover, 68% of the respondents from the ECHS sample as opposed to 52% of Junior respondents indicated that they would have liked to be involved in more campus activities during their first, full semester at the institution. When ECHS respondents were asked why they had never been involved and/or participated in these types of activities, although the majority of the respondents explained that they were unsure of how to get involved, or that the inconvenience of the commute and returning to campus as well as the times/days activities were offered was

inconvenient, 12% of the students said that there was an age difference (e.g. other students were older) which impacted their involvement. The fact that some ECHS respondents felt that their age effected their ability to be involved in social activities during the first semester at the four-year, public, research institution, draws a parallel to the study conducted by Noble et al. (2007) in which some of the participants in the Early Entrance Program at the University of Washington, also felt their age was problematic and may have prevented them from taking advantage of programs and services offered at the university.

Notwithstanding these findings, the majority of ECHS respondents, 49% think being connected to the community at the four-year, institution, as very or extremely important to them. The data from this study point towards ECHS students only feeling slightly connected to the UTEP community; 55% respondents as compared to 49% of the respondents from the Junior sample. In order to understand this phenomenon further, respondents' answers to questions related to their relationships with their peers was analyzed. To start with, 83% of ECHS respondents agree or strongly agree that they make friends easily. Accordingly, 44% of ECHS respondents stated that they formed four or more friendships during their first semester at the public institution which is in contrast to 55% of Junior respondents. Consequently, 50% of ECHS students indicated having already established supportive friendships outside the institution, 40% were unsure how to approach other students and 40% said that there was an age difference (e.g. other students were older) were the top reasons why ECHS respondents did not form any friendships during this period of time. Yet, for respondents who had not formed friendships during their first semester at the institution from the Junior sample, 40% was due to having supportive friendships outside the institution, 47% because they were unsure how to approach other students and one's age had no bearing on their ability to make friends. At the

same time, 96% of the ECHS sample experienced friendliness in their relationships with other students at UTEP. The desire to form relationships and feel connected to the campus community at the institution is highly valued by respondents who attended an early college high school reinforcing the outcome of the study conducted by Muratori, Colangelo and Assouline (2003) who determined through a study of participants in NAASE, an early entrance program facilitated by the University of Iowa, that participants spoke of their experiences within the context of the relationships they made and accordingly, those students who were more active on-campus, had the strongest network of friends.

In order to identify statistical differences in so far as social adjustment during the first, full semester at the four-year, public institution, t-tests were conducted on the responses of ECHS and Juniors for selected questions. These questions included those that were analyzed initially using frequencies and addressed the student's social adjustment to the institution. Specific questions in which t-tests were conducted were whether students participated in service-related activities as part of a course, participated in a student club, sought an internship and exercised or participated in physical fitness activities. These questions were selected because they were not only included in one of NSSE's benchmarks of Effective Educational Practice, Enriching Educational Experiences, activities contributing to a student's overall learning and personal development but as noted earlier, two of the activities, internships and service learning are deemed as high-impact educational experiences contributing to a student's cumulative learning (Kuh, 2008)

The results of the t-test analysis as noted in Table 4.5, indicate that there were no statistical differences ( $p < .05$ ) between ECHS and Juniors for questions pertaining to a student's participation in a student club, seeking an internship and participation in a physical fitness



activity. However, there was a statistically significant difference ( $p < .05$ ) between ECHS respondents and Junior respondents with regard to participation in community-based projects (e.g. service learning) when part of a course. The reason for this difference may have been due to the fact that students happened to be enrolled in courses during their first semester that included service-learning as a part of the curriculum and therefore, directly supported this type of activity.

Table 4.6: *t*-test Results for Social Adjustment during First Full Semester at Institution

	Samples	N	Mean	SD	<i>t</i> value	<i>p</i> value
Participated in community service as part of a class	ECHS	109	1.98	.991	-2.720	.007*
	Juniors	158	2.33	1.049	-2.749	.006
Participated in student club	ECHS	107	2.33	1.172	-1.454	.147
	Juniors	144	2.56	1.273	-1.472	.142
Sought an internship	ECHS	107	2.41	1.181	249	.277
	Juniors	144	2.58	1.192	229.633	.276
Exercised, participated in fitness activities	ECHS	107	2.70	1.092	249	.229
	Juniors	144	2.86	1.001	216.940	.235

\*Significance at  $p=0.05$

## **Chapter 5: Conclusions and Recommendations**

This chapter is organized with the overall conclusion of the study being shared initially, followed by recommendations regarding policy, practice and research. Limitations of this study are addressed at the conclusion of the chapter.

### **Conclusions**

It is evident from the review of literature that direct engagement and socialization in a university community encourages a student's overall development and positively impacts academic success (Tinto, 1987, 1988; Astin, 1993; Kraemer, 1997; Pascarella & Terezini, 2005). It is also clear that the creation of early college high schools has had a positive impact on students academically and financially with the majority of students earning college credit, thus increasing overall participation in higher education by minority, low-income students (Webb & Mayka, 2011). Therefore, ensuring that students from early college high school adjust socially and academically during their first semester at a four-year, public research institution is important for the student's success during college and the world of work.

As a result of this study, it would seem that students who had attended an early college high school, had a slightly easier time adjusting academically during the first semester to the four-year public, research institution. This was especially evident as it related to students comfort level asking questions of the instructor during and after class, using the library for research and applying study skills to class assignments. This outcome was supported by the fact that that majority of the respondents indicated that they felt well prepared academically to take classes at the four-year, public, research institution.

In so far as social adjustment of students who attended an early college high school during their first semester at the four-year, public, research institution compared to those who did

not participate in this type of program, data from this study indicate that early college high school students adjusted socially at a similar level as students who did not attend an early college high school. However, the data also indicate that ECHS respondents desired to be more engaged in campus activities but were unsure of how to get involved and for some; their age impacted their level of involvement. Moreover, a significant number of early college high school students did not chose to pursue internships which could be problematic since, on average, only three semesters remain at the four-year, public institution before a Bachelor's degree would be awarded to the student, a small window of time to engage in this type of experience.

Perhaps the most important conclusion that can be drawn from this study is that students who attended an early college high school, despite the age difference, in general, had very little issues with academic and social adjustment during their first semester at the four-year, public, research, institution. The participants in this study seemed to be generally, intellectually and socially engaged inside and outside of the classroom despite a desire to be more engaged, at a comparable level as juniors who had entered the four-year institution as first-time, full-time freshman.

## **Recommendations**

As programs such as early college high schools not only grow in popularity but serve as a viable solution to closing the academic achievement gaps of minorities, particularly Latinos, the fastest growing population in the United States, it is more important than ever to support and improve the early college high school initiative through policy, practice and further scholarly inquiry. As a result and based on the data collected from this study, the following recommendations are made.

## **Regarding Policy**

Recognizing that in today's world, a college degree is may be necessary to obtain a job, it is alarming that the gaps between the college educated and those that are not, are larger than ever before (Gandara & Contreras, 2009). As a nation, we must better connect secondary and post-secondary schooling especially in support of low-income, minority students. Knowing that Latinos are the fastest growing population in the United States, failure to educate this population means failing as a nation not only academically but economically as well. Recognizing that early college high schools provide a viable solution in closing the academic achievement gap by offering students a rigorous academic setting and the opportunity to earn college credit at no cost to the student, ensuring that policies at the state level continue to support these types of schools is absolutely necessary. First and foremost, we must assure that state policies promote and support a seamless transition of students from high school to college especially for low-income, minority students. Although the state of Texas leads the nation in the number of early college high schools and consequently policies and practices have been implemented to foster support and growth of these programs, results of studies such as this one can provide meaningful insight to parents, state representatives, academic leaders and the Texas Higher Education Coordinating Board to continue this good work.

Furthermore, knowing the impact that early college high schools have had on Latino students academic achievement and thus preparation for the workforce, supporting policies that recognize and strategically increase funding for institutions of higher education in the state of Texas to partner with community colleges and local school districts to implement early college high schools that do not currently exist would have a positive impact on not only the students being served by such but the local economy as well. According to Carnevale, Rose and Cheah

(2011), “a college degree is key to economic opportunity, conferring substantially higher earnings on those with credentials than those without,” (p. 1). Upon analysis of the 2007-2009 American Community Survey, someone earning an Associate’s degree, on average, will earn \$1.7 million during his/her lifetime as compared to \$1.3 million for an individual who has earned only a high school diploma (Carnevale, Rose & Cheah, 2011). Furthermore, earning some college credit, even if never earning a degree, adds nearly one-quarter of a million dollars to lifetime earnings,” (Carnevale, Rose & Cheah, 2011, p. 4).

On a more local level, institution-specific policies should be created and/or enhanced to support state and national policies as it relates to developing seamless pathways for minorities to attend college, receive financial assistance and make a smooth transition academically and socially from an early college high school to a four-year public, research institution. These policies should include formal articulation agreements between the four-year, public, research institution and the community college/early college high school as well as policies related to scholarships and financial assistance.

Regular and goal-oriented meetings between local administrators, educators, business leaders and legislators is encouraged to support policies that foster an environment of academic rigor while enrolled in an ECHS program, promote access for minorities for low-income, minority students to the four-year public institution and support students financially every step of the way.

### **Regarding Practice**

As a result of this study, it is recommended that orientation programs intended for students matriculating from early college high schools to a four-year, public, research institutions, be enhanced to include more information about how to get involved on-campus; an

initiative that Juniors would also benefit from. Additionally, seminars and/or workshops should be conducted with students while enrolled at an early college high school regarding career exploration, effective resumes and the benefits of engaging in an internship during the college years. Since research indicates that internships, like service learning activities, are considered high-impact experiences that benefit students academically and socially, conducting these seminars prior to students matriculating to the four-year, public, research institution, will ensure that students are well prepared for the considerable time and effort internships require. Lastly, since being connected to the university community is important as well as the relationships students have with one another, a peer mentoring program may help students feel more connected to the institution and consequently assist those students who are not sure how to approach other students or have shared that their age is a contributing factor to why they have not made friends. By intentionally fostering engagement with the University community through peer mentorship, early college high school students may further adopt the characteristics and norms of the higher education community that in turn enables the student to be successful socially and academically (Tinto, 1987).

### **Regarding Research**

Although the survey yielded interesting outcomes related to students' level of engagement in and outside the classroom while enrolled in an early college high school and during the first semester at the four-year public institution, expanding the level of inquiry to include personal interviews and/or focus groups would have yielded the "thick description" and valuable insight that this study deserved. A matter of fact, scholars such as Denzin and Lincon (2005) and Erickson (1986) have recognized that the reliance on survey data exclusively does not

explain the theoretical context that causes relationships to occur between actors and/or the influence and/or the impact of these relationships.

Additionally, future studies should examine differences in academic and social adjustment by gender to determine whether there are any disparities amongst males and females. At the same time, correlating the data collected from the survey to the individual and the specific early college high school may help identify trends programmatically and academically that are supporting a student's social and academic adjustment during the first semester and the four-year, public institution. In essence "best practices" would be identified that could be shared with parents, educators and policy makers. Moreover, expanding the current study to one that involves students from multiple institutions would possibly produce some statistically significant results, enhancing the degree to which the data can be generalized to all students who enter college early. The fact that since 2002, more than 230 early college high schools have been redesigned or implemented in 28 states serving 47,000 students, the ability to conduct a multi-institutional assessment is a viable one. This type of study would be particularly relevant in the state of Texas where there is not only a large number of early college high schools already in existence, but a significant Latino population who could benefit from such a program.

There is also merit to conducting a study in which faculty are asked about ECHS academic and social adjustment to the four-year institution. Lastly, conducting a longitudinal study, not only while enrolled at the institution of higher education but once they graduate may yield data that would benefit educators and researchers who have an interest in the short-term and long-term success of these students.

## References

- American Institutes for Research and SRI International. (2008). Emerging patterns and relationships: A summary of the early college high school initiative evaluation report. Retrieved from [http://docs.gatesfoundation.org/learning/documents/echsi\\_evaluation\\_summary\\_2003-07.pdf](http://docs.gatesfoundation.org/learning/documents/echsi_evaluation_summary_2003-07.pdf).
- Astin, A. (1993). What matters in college? *Liberal Education, Fall* 93(79), 4-15.
- Bailey, T & Karp, M (2003). *Promoting college access and success: A review of credit based transition programs*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education,
- Bailey, T., Hughes, K. & Karp, M. (2002). *What role can dual credit enrollment programs play in easing the transition between high school and postsecondary education?* Washington, DC: U.S. Department of Education, Office of Adult and Vocational Education.
- Bonous-Hammarth, M. (2000). Pathways to success: Affirming opportunities for science, mathematics, and engineering majors. *Journal of Negro Education*, 69(1), 92-111.
- Born, T. (2006). Middle and early college high schools-Providing multilevel support and accelerated learning. *New Directions in Community Colleges*, 135, 49-58.
- Bureau of Labor Statistics. (2012). *The Latino labor force at a glance*. Washington, DC: U.S. Department of Labor.
- Campbell, C. & Cabrera, A. (2011). How sound is NSSE? Investigating the psychometric properties of NSSE at a public, research-extensive institution. *The Review of Higher Education*, 35(1), 77-103.



- Carnevale, A., Rose, S. & Cheah, B. (2011). The college payoff: Education, occupations, lifetime earnings. The Georgetown University Center on Education and the Workforce. Retrieved from: [www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/collegepayoff-complete.pdf](http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/collegepayoff-complete.pdf)
- Clarkberg, M. & Einarson, M. (n.d.). Improving response rates through better design: Rethinking a web-based survey instrument. Retrieved from <http://www.dpb.cornell.edu/documents/1000421.pdf>.
- Coleman, G., Burnam, L., Naishtat, E. & Anchia, R. (2011). Texas on the brink: A report from the Texas legislative study group on the state of our state. Retrieved from <http://texaslsg.org/texasonthebrink>
- Conley, D. (2007). Toward a more comprehensive conception of college readiness. Education Policy Improvement Center
- Cooper, C., Denner, J. & Lopez, E. (1999). Cultural brokers: Helping Latino children on pathways toward success. *The Future of Children, When School is Out*, 9(2), 51-57.
- Core Principals (2008). Retrieved from <http://www.earlycolleges.org/Downloads/CorePrinciples.pdf>
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Delgado-Gaitan, C. (1992). School matters in the Mexican-American home: Socializing children in education. *American Educational Research Journal*, 29(3), 495-513.
- Denzin, N. & Lincon, Y. (2005). The discipline and practice of qualitative research. In Denzin, N. and Lincon, Y. (Eds). *Sage Handbook of Qualitative Research*, 2<sup>nd</sup> ed. (Pp. 1-25). Sage Publications, Inc.

- Dey, E. & Hurtado, S. (2005). College students in changing contexts. In a P. Altbach, R. Berdahl and P. Gumport (Eds), *American higher education in the twenty-first century: Social, political and economic challenges* (pp. 198-225) Baltimore, MD: Johns Hopkins University Press.
- Early College High School Initiative* (2011). Retrieved from <http://www.earlycolleges.org/>
- Early College High School Initiative*. (2013). Retrieved from <http://www.earlycolleges.org/>
- Early college high schools: A portrait in numbers (2010). Retrieved from <http://www.jff.org/publications/education/portrait-numbers/741>
- Erickson, E. (1980). *Identity and the life cycle*. New York, NY: W. W. Norton & Company, Inc.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of Research on Teaching*, 3<sup>rd</sup> ed. (Pp. 119-161). NU: Macmillan.
- Facts*. (2013). Center for Institutional Evaluation, Research and Planning. Retrieved from <http://universitycommunications.utep.edu/facts/index.html>.
- Foster, K. (2008). The transformative potential of teacher care as described by students in higher education access initiative. *Education and Urban Society*, 41(104), 104-126.
- Gandera, P. & Contreras, F. (2009). *The Latino education Crisis: The consequences of failed social policies*. Harvard University Press, Cambridge, MA.
- Geiger, R. (2005) The ten generations of American higher education. In a P. Altbach, R. Berdahl and P. Gumport (Eds), *American higher education in the twenty-first century: Social, political and economic challenges* (pp. 38-70) Baltimore, MD: Johns Hopkins University Press.

- Goldenberg, C., Gallimore, R., Reese, L. & Garnier, H. (2001). Cause or effect? A longitudinal study of immigrant Latino parents' aspirations and expectations, and their children's school performance. *American Educational Research Journal*, 38(3), 547-582.
- Goldberg, S. & Santos, J. (2009) Lessons from the lone star state: Designing a sustainable financial model to expand early college high school in Texas. Early College High School Initiative, Jobs for the Future:  
<http://www.jff.org/sites/default/files/ECHSLoneStarState.pdf>
- Gutmann, A. (1990). Democratic education in difficult times. *Teachers College Record*, 92, 7-20.
- Hesburgh, T., Horn, S., Freeman, F., Mitchell, M., Rankin, R. & Ruiz, M. (1971). *Mexican American education study: Ethnic isolation of Mexican Americans in the public school of the southwest, Report 1*. Washington D.C.: U.S. Commission on Civil Rights.
- Hoffman, N. (2003). College credit in high school: Increasing college attainment rates for underrepresented students. Boston: Jobs for the Future.
- Hoffman, N., Vargas, J., & Santos, J. (2008). Blending high school and college: Rethinking the transition. *New Directions in Higher Education*, 144, 15-25.
- Hoffman, N., Vargas, J., & Santos, J. (2009). New directions for dual enrollment: Creating stronger pathways from high school through college. *New Directions for Community Colleges*, 144, 43-58.
- Kahlenberg R. (2011, September 1). Innovations: Insights and commentary on higher education. *The purposes of higher education*. Retrieved from [chronicle.com/blogs/innovations/the-purpose-of-higher-education/30258](http://chronicle.com/blogs/innovations/the-purpose-of-higher-education/30258).

- Kraemer, B. (1997). The academic and social integration of Hispanic student in college. *The Review of Higher Education*, 20.2, 163-179.
- Kuh, G. (2001). The national survey of student engagement: Conceptual framework and overview of psychometric properties. Indiana University for Postsecondary Research and Planning.
- Kuh, G. & Gonyea, M. (2003). The role of the academic library in promoting student engagement in learning. *College and Research Libraries*, 64, 256-282.
- Kuh., G, Kinzie, J., Schuh, J., Whitt, E. & Associates (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Lareau, A. (2003). *Unequal childhoods: Class, race and family life*. Berkeley, CA: University of California at Berkeley Press.
- Long, B. (2012). Supporting access to higher education: The college preparation and financial assistance programs of the war on poverty. Retrieved from <http://npc.umich.edu/news/events/war-on-poverty-june-conference/long.pdf>
- McGuinness, A. (2005) The state and higher education. In a P. Altbach, R. Berdahl and P. Gumport (Eds), *American higher education in the twenty-first century: Social, political and economic challenges* (pp. 198-225) Baltimore, MD: Johns Hopkins University Press.
- McNeil, L. A. (2000). *Contradictions of school reform*. New York, NY: Routledge.
- Muñiz, M (2006). *Latinos in higher education: Snapshot from the academic literature*. Prepared for the College Board Advocacy and Policy Center, New York City.
- Muratori, M., Colangelo, N. & Assouline, S. (2003). Early-entrance students: Impressions of their first semester of college. *National Association for Gifted Children (NAGC)*, 37(3), 219-238.

- Museus, S., Lutovsky, B. & Colbeck, C. (2007). Access and equity in dual enrollment programs: Implications for policy formation. *Higher Education in review*, 4, 1-19.
- Nieto, S. (1994). Lessons from students on creating a chance to dream. *Harvard Educational Review*, (64)4, 392-426.
- Noble, K., Vaughan, R., Chan, C., Childers, S., Chow, B., Federow, A., et al (2007). Love and work: The legacy of early university entrance. *Gifted Child Development*, 51(2), 152-166.
- National Survey of Student Engagement*. (2013). Retrieved from <http://nsse.iub.edu/html/about.cfm>.
- Pascarella, E. & Terenzini, P. (2005). How college affects students: A third decade of research. (Vol. 2). San Francisco, CA: Jossey-Bass.
- Pennington, H. (2004). "Fast Track to College: Increasing Postsecondary Success for All Students." *Center for American progress and Institute for America's Future*, pp. 1-36.
- Pew Hispanic Center/Kaiser Family Foundation (2004). *National Survey of Latinos: Education, Summary and Chartpack*. Washington, DC: Pew Hispanic Center.
- Ritter, L. & Sue, V. (Eds.). (2007). The use of online surveys in evaluation: Introduction to Using Online Surveys. *New directions for evaluation*, 115, 5-14.
- Ritter, L. & Sue, V. (Eds.). (2007). The use of online surveys in evaluation: Questions for online surveys. *New directions for evaluation*, 115, 29-36.
- Rogers, K. & Kimpston, R. (1992). Acceleration: What we do vs. what we know. *Association for Supervision and Curriculum Development*, Oct. 1992.
- Sotomayor, F. (1974). *Para Los Ninos-For The Children Improving Education for Mexican Americans*. U.S. Commission of Civil Rights, Clearinghouse Publication 47

- Texas high school project (2011). Retrieved from the Texas Education Agency website at [www.tea.state.tx.us/index2.aspx?id=4215](http://www.tea.state.tx.us/index2.aspx?id=4215).
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: The University of Chicago Press.
- Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher education*, July-Aug. 1988(59)4, 438-455.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- U. S. Census Bureau. (2010). *The Hispanic Population: 2010*. Retrieved August 27, 2011 from <http://www.census.gov/prod/cens010/briefs/c2010/briefs/c2010br-04.pdf>.
- Valdes, G. (1996). *Con respeto: Bridging the distanced between culturally diverse families and schools: An ethnographic portrait*. New York, New York: Teachers College Press.
- Valenzuela, A. ed. (2005). *Leaving children behind: How "Texas-style" accountability fails Latino youth*, Suny, New York: SUNY Press.
- Waits, T., Setzer, J. C., & Lewis, L. (2005). *Dual credit and exam-based courses in U.S. public high schools: 2002–03* (NCES 2005–009). U.S. Department of Education. W
- Waterman, A. (1982). Identity development from adolescence to adulthood: An extension of theory and review of research. *Developmental Psychology*, 18(3), 341-358.
- Webb, M. & Mayka, L. (2011). *Unconventional wisdom: A profile of the graduates of early college high schools*. Jobs for the Future, Retrieved from [http://www.jff.org/sites/default/files/Unconventional\\_Wisdom\\_PDF\\_033011.pdf](http://www.jff.org/sites/default/files/Unconventional_Wisdom_PDF_033011.pdf)
- Zusman, A. (2005). Challenges facing higher education in the twenty first century. In a P. Altbach, R. Berdahl and P. Gumport (Eds), *American higher education in the twenty-first*

*century: Social, political and economic challenges* (pp. 115-162) Baltimore, MD: Johns Hopkins University Press.

## Appendix A: Institutional IRB Approval



**THE UNIVERSITY OF TEXAS AT EL PASO**  
**Office of the Vice President for Research and Sponsored Projects**  
**Institutional Review Board**

El Paso, Texas 79968-0587  
phone: 915 747-8841 fax: 915 747-5931

FWA No: 00001224

DATE: August 29, 2012

TO: Catie McCorry-Andalis

FROM: University of Texas at El Paso IRB

STUDY TITLE: [297699-1] Academic, Social and Psychological Adjustment of Students  
Transitioning From an Early College High School Program to an Institution of  
Higher education: A Single Institution Study

IRB REFERENCE #: 297699-1

SUBMISSION TYPE: New Project

ACTION: APPROVED

APPROVAL DATE: August 29, 2012

EXPIRATION DATE: August 29, 2013

REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this research study. University of Texas at El Paso IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This study has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed.



Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years after termination of the project.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

If you have any questions, please contact Athena Fester at (915) 747-8841 or [afester@utep.edu](mailto:afester@utep.edu). Please include your study title and reference number in all correspondence with this office.

cc:

## Appendix B: Survey Instrument

### Page - Demographics

Q2 What is your current major? (If you have not declared a major, indicate "Unsure")

Accounting [Code = 1]
African American Studies [Code = 2]
Anthropology [Code = 3]
Applied Mathematics [Code = 4]
Art [Code = 5]
Art Education [Code = 6]
Art Foundations [Code = 7]
Art History [Code = 8]
Biological Sciences (B.S.) [Code = 9]
Biology (B.A.) [Code = 10]
Business Administration [Code = 11]
Chemistry (B.A.) [Code = 12]
Chemistry (B.S.) [Code = 13]
Chicana Studies [Code = 14]
Civil Engineering [Code = 15]
Clinical Laboratory Science [Code = 16]
Communication [Code = 17]
Communication Studies [Code = 18]
Communications - Electronic Media [Code = 19]
Communications - Media Advertising [Code = 20]
Communications - Organizational and Corporate [Code = 21]
Communications - Print Media [Code = 22]
Computer Information Systems [Code = 23]
Computer Science [Code = 24]
Creative Writing [Code = 25]
Criminal Justice [Code = 26]
Dance [Code = 27]
Earth Science [Code = 28]
Economics (B.A.) [Code = 29]
Economics (B.B.A.) [Code = 30]
Education: Interdisciplinary Studies [Code = 31]
Electrical Engineering [Code = 32]
Electronic Media [Code = 33]
English [Code = 34]
English and American Literature [Code = 35]
Environmental Science [Code = 36]
Exchange Student [Code = 37]
Finance [Code = 38]
French [Code = 39]
General Business [Code = 40]
General Studies [Code = 41]
Geological Sciences (B.S.) [Code = 42]

Geology (B.A.) [Code = 43]
Geophysics [Code = 44]
German [Code = 45]
Health Promotion [Code = 46]
Health Science [Code = 47]
History [Code = 48]
Industrial Engineering [Code = 49]
Interdisciplinary Studies (B.S.) [Code = 50]
International Manufacturing Certificate [Code = 51]
Kinesiology [Code = 52]
Latin American and Border Studies [Code = 53]
Life / Earth Science [Code = 54]
Linguistics [Code = 55]
Management [Code = 56]
Marketing [Code = 57]
Mathematics (B.A.) [Code = 58]
Mathematics (B.S.) [Code = 59]
Mechanical Engineering [Code = 60]
Metallurgical and Materials Engineering [Code = 61]
Microbiology [Code = 62]
Multidisciplinary Studies (B.M.S.) [Code = 63]
Music: General [Code = 64]
Music: Education [Code = 65]
Music: Performance [Code = 66]
Music Theory and Composition [Code = 67]
Musical Theatre [Code = 68]
Natural Science [Code = 69]
Nursing, Generic [Code = 70]
Nursing, R.N. [Code = 71]
Occupational Therapy [Code = 72]
Operations and Supply Chain Management [Code = 73]
Philosophy [Code = 74]
Physical Science [Code = 75]
Physics (B.A.) [Code = 76]
Physics (B.S.) [Code = 77]
Political Science [Code = 78]
Pre-Physical Therapy [Code = 79]
Pre-College of Health Sciences [Code = 80]
Pre-Engineering, Generic [Code = 81]
Pre-Business/UG [Code = 82]
Pre-Education/Elementary/BIS [Code = 83]
Pre-Nursing, Generic [Code = 84]
Pre-Pharmacy/UG [Code = 85]
Pre-Science [Code = 86]
Pre-Speech/Language Pathology [Code = 87]
Production / Operation Management [Code = 88]
Psychology (B.A.) [Code = 89]

Psychology (B.S.) [Code = 90]	
Sociology [Code = 91]	
Social Work [Code = 92]	
Spanish [Code = 93]	
Spanish Language Print Media [Code = 94]	
Spanish Language Electronic Media [Code = 95]	
Start Program [Code = 96]	
Studio Art: Ceramics [Code = 97]	
Studio Art: Drawing [Code = 98]	
Studio Art: Graphic Design [Code = 99]	
Studio Art: Metals [Code = 100]	
Studio Art: Painting [Code = 101]	
Studio Art: Printmaking [Code = 102]	
Studio Art: Sculpture [Code = 103]	
Theatre [Code = 104]	
Other (Not listed here) [Code = 105]	
Unsure[Code = 106]	
Required answers: 1	Allowed answers: 1

Q3 How many times have you officially changed your major since starting at UTEP?

1 time[Code = 1]		
2 times[Code = 2]		
3 times[Code = 3]		
4 times[Code = 4]		
More than 4 times[Code = 5]		
I have not changed my major.[Code = 0] [N/A]		
	Required answers: 1	Allowed answers: 1

Q4 With which ethnicity do you identify?

Asian American[Code = 1]		
Black - non Hispanic[Code = 2]		
Hispanic[Code = 3]		
Native American[Code = 4]		
White - non Hispanic[Code = 5]		
International - Mexican National[Code = 6]		
International - Others[Code = 7]		
Choose not to respond[Code = 0] [N/A]		
	Required answers: 1	Allowed answers: 1

Q5 With which gender do you identify?

Male[Code = 1]		
Female[Code = 2]		
Transgender[Code = 3]		
Choose not to respond[Code = 0] [N/A]		
	Required answers: 1	Allowed answers: 1

Q6 What is your current classification at UTEP?

Freshman (0 - 29 hours)[Code = 1]

Sophomore (30 - 59 hours)[Code = 2]

Junior (60 - 89 hours)[Code = 3]

Senior (90 or more hours)[Code = 4]

Required answers: 1

Allowed answers: 1

Q7 While attending UTEP the first full semester (fall or spring), where were you living?

Off campus, with parent(s)[Code = 1]

Off campus, with other family member(s)[Code = 2]

Off campus, with other(s)[Code = 3]

Off campus, independently[Code = 4]

On campus, Miner Village or Miner Heights[Code = 5]

Other (please specify)[Code = 6] [Textbox]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Page - Academics

Indicate your level of agreement with the following statements:

Q8 Upon entering UTEP, I was well prepared for college.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1

Allowed answers: 1

Q9 My family encourages my efforts to get a college education.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1

Allowed answers: 1

Q10 Upon entering UTEP, I expected to make at least a B average my first semester.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1

Allowed answers: 1

Q11 I felt well-prepared for taking classes at UTEP.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1

Allowed answers: 1

Q12 To get good grades at UTEP, I have had to study harder than I did in my Early College High School Program.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q13 Since arriving at UTEP, it is difficult to earn good grades.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q14 Upon entering UTEP, I was sure of the career I wanted to pursue.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q15 Upon entering UTEP, I knew that upon completion of my bachelor degree, I would immediately enter the world of work.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q16 Upon entering UTEP, I knew that upon the completion of my bachelor degree, I would immediately pursue a graduate degree.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q17 I worried about finances upon entering UTEP.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q18 I worried about finding a job on campus.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Q19 I worried about making friends upon entering UTEP.

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

While enrolled in an Early College High School Program, how often did you do each of the following?

Q20 Worked with other students on projects during class

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q21 Worked with a classmate outside of class to prepare class assignments

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q22 Participated in community-based projects (e.g., service learning) as part of a course

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q23 Participated in community-based projects (e.g., service learning) outside of class

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q24 Talked about career plans with a faculty member or advisor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q25 Visited with a Career Counselor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q26 Worked harder than you thought you could to meet an instructor's standards and expectations

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q27 Had serious conversations with students of a different race or ethnicity than you

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q28 Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions or personal values

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

During your first full semester at UTEP, how often did you do each of the following?

Q29 Worked with other students on projects during class

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1



Q30 Worked with a classmate outside of class to prepare class assignments

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q31 Participated in community-based projects (e.g., service learning) as part of a course

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q32 Participated in community-based projects (e.g., service learning) outside of class

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q33 Talked about career plans with a faculty member or advisor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q34 Visited with a Career Counselor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q35 Worked harder than you thought you could to meet an instructor's standards and expectations

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q36 Had serious conversations with students of a different race or ethnicity than you

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q37 Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions or personal values

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

During your first full semester at UTEP, how comfortable were you with doing the following?

Q38 Thinking critically, analyzing and solving problems

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1 Allowed answers: 1

Q39 Expressing yourself through speaking in English

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1 Allowed answers: 1

Q40 Expressing yourself through writing in English

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1 Allowed answers: 1

Q41 Using computers for electronic communication

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1 Allowed answers: 1

**Q42 Using the library for research**

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1

Allowed answers: 1

**Q43 Asking questions in class**

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1

Allowed answers: 1

**Q44 Asking instructors questions outside of class**

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1

Allowed answers: 1

**Q45 Applying study skills to class assignments**

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1

Allowed answers: 1

**Q46 Managing your time**

Very comfortable[Code = 4]

Comfortable[Code = 3]

Uncomfortable[Code = 2]

Very uncomfortable[Code = 1]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

**Page - Involvement**

While enrolled in an Early College High School Program, how often did you do each of the following?

**Q47 Attended an art exhibit, play, dance, music theater or other performance**

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1

Allowed answers: 1

Q48 Exercised or participated in physical fitness activities		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

  

Q49 Participated in activities that enhanced your spirituality (worship, mediation, prayer, etc.)		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

  

Q50 Tried to better understand someone else's views by imagining how an issue looks from his or her perspective		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

  

Q51 Learned something that changed the way you understand an issue or concept		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

  

Q52 Were employed part-time		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

  

Q53 Participated in a student club or organization		
Often[Code = 4]		
Occasionally[Code = 3]		
Rarely[Code = 2]		
Never[Code = 1]		
		Required answers: 1      Allowed answers: 1

Q54 Learned how to write (or improve) your resume with help from a career counselor or guidance counselor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q55 Sought an internship related to your degree or future career interests

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

During your first full semester at UTEP, how often have you done each of the following?

Q56 Attended an art exhibit, play, dance, music theater or other performance

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q57 Exercised or participated in physical fitness activities

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q58 Participated in activities that enhanced your spirituality (worship, mediation, prayer, etc.)

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q59 Tried to better understand someone else's views by imagining how an issue looks from his or her perspective

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1      Allowed answers: 1

Q60 Learned something that changed the way you understand an issue or concept

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q61 Were employed part-time

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q62 Participated in a student club or organization

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q63 Learned how to write (or improve) your resume with help from a career counselor or guidance counselor

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Q64 Sought an internship related to your degree or future career interests

Often[Code = 4]

Occasionally[Code = 3]

Rarely[Code = 2]

Never[Code = 1]

Required answers: 1 Allowed answers: 1

Please answer the following questions based on your involvement during your first full semester at UTEP:

Q65 Were you a member of at least one student club or organization?

Yes[Code = 1]

No[Code = 2]

Required answers: 1 Allowed answers: 1

Q66 Were you involved in at least one intramural team, club sport or organized fitness program?

Yes[Code = 1]

No[Code = 2]

Required answers: 1 Allowed answers: 1

Q67 Were you a member of a Greek organization?

Yes[Code = 1]

No[Code = 2]

Required answers: 1 Allowed answers: 1

Q68 Were you a member of an intercollegiate athletic team?

Yes[Code = 1]

No[Code = 2]

Required answers: 1 Allowed answers: 1

Next Page: Sequential

Page - 5

Q69 Which of the following reasons best describes why you were not involved in any of the following activities: student club/organization, intramural group, club sport, organized fitness, Greek organization, or intercollegiate athletic team? (Check all that apply)

Family obligations[Code = 1]

Work obligations[Code = 2]

Times/days of activities were not convenient[Code = 3]

Inconvenience of commuting and returning to campus[Code = 4]

Interferes with academic obligations (e.g., studying, group work)[Code = 5]

Interferes with social commitments (e.g., going out, socializing with friends)[Code = 6]

Commitments to off-campus activities[Code = 7]

Intercollegiate athletics[Code = 8]

Unsure of how to get involved[Code = 9]

Unable to bring children/spouse[Code = 10]

I don't like to participate alone[Code = 11]

I'm too shy[Code = 12]

There was an age difference (e.g., other students were older)[Code = 13]

I don't feel accepted/events are unwelcoming[Code = 14]

There isn't anything I like to participate in[Code = 15]

Other (please specify)[Code = 16] [Textbox]

Nothing prevented me from participating in these activities, but I chose not to do so.[Code = 0] [N/A]

Required answers: 1 Allowed answers: 17

Display if Q65='No' AND Q66='No' AND Q67='No' AND Q68='No'

Q70 Generally, how involved were you in campus activities during your first full semester at UTEP?

I attended events/activities, but did not help plan the activity.[Code = 1]

I helped plan or served as a team captain for events/activities.[Code = 2]

I held a leadership position in groups/organizations that planned events on campus.[Code = 3]

Required answers: 1 Allowed answers: 1

Display if Q65='Yes' OR Q66='Yes' OR Q67='Yes' OR Q68='Yes'

Q71 During your first full semester at UTEP, were you as involved in campus activities as you would have liked to be?

I would have liked to be involved in more campus activities. [Code = 1]

I was content with my level of involvement in campus activities.[Code = 2]

I would have liked to be involved in fewer campus activities.[Code = 3]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Page - 6

Q72 What was holding you back from being involved in more campus activities? (Check all that apply)

Family obligations[Code = 1]

Work obligations[Code = 2]

Times/days of activities were not convenient[Code = 3]

Inconvenience of commuting and returning to campus[Code = 4]

Interferes with academic obligations (e.g., studying, group work)[Code = 5]

Interferes with social commitments (e.g., going out, socializing with friends)[Code = 6]

Commitments to off-campus activities[Code = 7]

Intercollegiate athletics[Code = 8]

Unsure of how to get involved[Code = 9]

Unable to bring children/spouse[Code = 10]

I don't like to participate alone[Code = 11]

I'm too shy[Code = 12]

There was an age difference (e.g., other students were older)[Code = 13]

I don't feel accepted/events are unwelcoming[Code = 14]

There isn't anything I like to participate in[Code = 15]

Other (please specify)[Code = 16] [Textbox]

Required answers: 1

Allowed answers: 16

Display if Q71='I would have liked to be involved in more campus activities. '

Next Page: Sequential

Page - Formation of Relationships

To what extent have you experienced the following in your relationships with other students at UTEP?

Q73 Friendliness

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

Required answers: 1

Allowed answers: 1

Q74 Support

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

Required answers: 1

Allowed answers: 1



**Q75 Sense of belonging**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1***To what extent have you experienced the following in your relationships with faculty members at UTEP?****Q76 Availability**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1***Q77 Helpfulness**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1***Q78 Sympathy**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1***To what extent have you experienced the following in your relationship with your academic advisor at UTEP?****Q79 Availability**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1***Q80 Helpfulness**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

*Required answers: 1      Allowed answers: 1*

**Q81 Sympathy**

Significantly[Code = 4]

Moderately[Code = 3]

Slightly[Code = 2]

Not at all[Code = 1]

Required answers: 1      Allowed answers: 1

Please indicate your agreement with the following statements. These statements refer to your experience both on and off UTEP's campus:

**Q82 I make friends easily.**

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

**Q83 I get the emotional help and support I need from my social network (e.g., friends and acquaintances).**

Strongly agree[Code = 4]

Agree[Code = 3]

Disagree[Code = 2]

Strongly disagree[Code = 1]

Required answers: 1      Allowed answers: 1

Next Page: Sequential

Page - 8

**Q84 In what way(s) do you not receive the emotional help and support you need from your social network? (Check all that apply)**

My feelings are not valued or respected[Code = 1]

I don't receive compliments[Code = 2]

I don't feel listened too[Code = 3]

I'm ignored[Code = 4]

I am not touched in a friendly way [Code = 5]

I am told that I am too young or too old[Code = 6]

My social network doesn't understand my career aspirations[Code = 7]

My social network can't relate to me due to the age difference[Code = 8]

My social network can't relate to my life goals[Code = 9]

Other (please specify)[Code = 10] [Textbox]

Required answers: 1      Allowed answers: 10

Display if Q83='Disagree' OR Q83='Strongly disagree'

Q85 Why do you find it difficult to make friends? (Check all that apply)

I'm not sure how to approach other students[Code = 1]

I've always had difficulty making friends[Code = 2]

Lack the time to spend socially with others[Code = 3]

Too shy to approach others[Code = 4]

Found little in common socially with others[Code = 5]

Found little in common intellectually with others[Code = 6]

Was unsure how to form those friendships[Code = 7]

There was an age difference (e.g., other students were older)[Code = 8]

Other (please specify)[Code = 9] [Textbox]

Required answers: 1

Allowed answers: 9

Display if Q82='Disagree' OR Q82='Strongly disagree'

Next Page: Sequential

Page - 9

Q86 Which of the following factors contributes the **most** to why you lack the time to spend socially with others? (Check all that apply)

I prefer to spend my time alone or in solitary activities[Code = 1]

Work commitments[Code = 2]

Academic commitments[Code = 3]

Family commitments[Code = 4]

Other (please specify)[Code = 5] [Textbox]

Required answers: 1

Allowed answers: 5

Display if Q85='Lack the time to spend socially with others'

Q87 Approximately how many friendships (e.g., an extremely close connection/friendship, a non-sexual relationship) did you form at UTEP during your first full semester?

None[Code = 1]

1 friendship[Code = 2]

2 friendships[Code = 3]

3 friendships[Code = 4]

4 friendships[Code = 5]

More than 4 friendships[Code = 6]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Q88 Why do you believe that you did not form friendships during your first full semester at UTEP? (Check all that apply)

I already had supportive friendships outside of the UTEP campus[Code = 1]

I'm not sure how to approach other students[Code = 2]

I've always had difficulty making friends[Code = 3]

Lack the time to spend socially with others[Code = 4]

Too shy to approach others[Code = 5]

Found little in common socially with others[Code = 6]

Found little in common intellectually with others[Code = 7]

Was unsure how to form those friendships[Code = 8]

There was an age difference (e.g., other students were older)[Code = 9]

Other (please specify)[Code = 10] [Textbox]

I was not looking to form any friendships [Code = 0] [N/A]

Required answers: 1

Allowed answers: 11

Display if Q87='None'

Q89 Approximately how many intimate sexual relationships (e.g., a boyfriend or girlfriend) did you have during your first full semester at UTEP?

None[Code = 1]

1 intimate sexual relationship[Code = 2]

2 intimate sexual relationships[Code = 3]

3 intimate sexual relationships[Code = 4]

4 intimate sexual relationships[Code = 5]

More than 4 intimate sexual relationships[Code = 6]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Q90 Why do you believe that you did not form any intimate sexual relationships during your first full semester at UTEP? (Check all that apply)

I already had intimate sexual relationships outside of the UTEP campus[Code = 1]

I'm not sure how to begin forming these types of relationships[Code = 2]

I've always had difficulty continuing these types of relationships[Code = 3]

Lack the time to spend socially with others[Code = 4]

Too shy to approach others[Code = 5]

Found little in common socially with others[Code = 6]

Found little in common intellectually with others[Code = 7]

Was unsure how to form those friendships[Code = 8]

There was an age difference (e.g., other students were older)[Code = 9]

Other (please specify)[Code = 10] [Textbox]

I was not looking to form any intimate sexual relationships[Code = 0] [N/A]

Required answers: 1

Allowed answers: 11

Display if Q89='None'

Next Page: Sequential

Q91 At the time you applied for admission, how did you rank UTEP?

1st choice of college [Code = 1]

2nd choice of college [Code = 2]

3rd choice of college [Code = 3]

4th choice of college [Code = 4]

Don't remember [Code = 0] [N/A]

Required answers: 1

Allowed answers: 1

Q92 Did any of the following influence your decision to apply to UTEP? (Check all that apply)

High school guidance counselor [Code = 1]

High school teacher [Code = 2]

Participation in the Early College High School program [Code = 3]

Participation in a Magnet School (e.g., Chapin, Silva, International Baccalaureate) [Code = 4]

Enrollment in Dual-credit or AP classes [Code = 5]

UTEP representatives [Code = 6]

UTEP campus visit [Code = 7]

Family member(s) [Code = 8]

Friend(s) [Code = 9]

Other (please specify) [Code = 10] [Textbox]

Don't remember [Code = 0] [N/A]

Required answers: 1

Allowed answers: 11

Q93 What was your MOST important reason for attending UTEP?

UTEP offers the degree program(s) I want [Code = 1]

UTEP has a good academic reputation [Code = 2]

UTEP has affordable tuition [Code = 3]

Seemed like an easy transition from my Early College High School Program [Code = 4]

Seemed like an easy transition from my Magnet School [Code = 5]

Seemed like an easy transition due to my dual credit and/or AP coursework [Code = 6]

I wanted to stay close to home [Code = 7]

I received financial aid [Code = 8]

I received a scholarship [Code = 9]

I was not accepted anywhere else [Code = 10]

Other (please specify) [Code = 11] [Textbox]

Required answers: 1

Allowed answers: 1

Q94 Do you plan to obtain your bachelor's degree from UTEP?

Yes [Code = 1]

No [Code = 2]

Required answers: 1

Allowed answers: 1

Q95 Upon entering UTEP, how long did you expect to take to earn your bachelor degree?

1 more year[Code = 1]

2 more years[Code = 2]

3 more years[Code = 3]

4 more years[Code = 4]

More than 4 years[Code = 5]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Page - 13

Q96 Why do you expect it to take longer than two years to complete your bachelor degree? (Check all that apply)

I have to work more than 20+ hours a week (no more than 35 hours) and this will/has delayed my graduation date.[Code = 1]

I have to work 40+ hours per week and this will/has delayed my graduation date.[Code = 2]

Some of the core classes I need to complete my degree were not available and this delayed my graduation date.[Code = 3]

Finances are tight and therefore I have or will have to take a semester off so I can earn some money for tuition.[Code = 4]

I have, or intend to, change my major, causing me to enroll in additional classes; this will/has delayed my graduation date.[Code = 5]

I have, or intend to, double major, causing me to enroll in additional classes; this will or has delayed my graduation date.[Code = 6]

I don't feel academically prepared for my career or graduate studies and will/have enrolled in additional courses in order to feel more academically prepared.[Code = 7]

I don't feel I have enough hands-on experience for the career I want to pursue and will/have decided to extend my time to graduation so that I can pursue an internship, co-ops, or other types of work experiences in order to gain this type of experience.[Code = 8]

I feel that my age (too young) will be a problem when trying to pursue a job so I will/have delayed my graduation so I am older. [Code = 9]

I don't feel I am socially prepared for the world of work or graduate studies and will/have delayed my graduation so I am more socially prepared.[Code = 10]

Other (please specify)[Code = 11] [Textbox]

Required answers: 1

Allowed answers: 11

Display if Q95='3 more years' OR Q95='4 more years' OR Q95='More than 4 years'

Q97 What is the highest degree you expect to obtain?

Bachelor's[Code = 1]

Master's (e.g., MA, MS, MBA)[Code = 2]

Doctorate[Code = 3]

Professional (e.g., medical, law, architecture, dental, veterinary)[Code = 4]

Other (please specify)[Code = 5] [Textbox]

Unsure[Code = 0] [N/A]

Required answers: 1

Allowed answers: 1

Q98 How important is it to you to feel connected to the UTEP community?

Extremely important[Code = 4]

Very important[Code = 3]

Slightly important[Code = 2]

Not at all important[Code = 1]

Required answers: 1

Allowed answers: 1

Q99 How connected do you currently feel to the UTEP community?

Extremely connected[Code = 4]

Very connected[Code = 3]

Slightly connected[Code = 2]

Not at all connected[Code = 1]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Page - 14

Q100 Why do you currently not feel connected to the UTEP community?

Family obligations[Code = 1]

Work obligations[Code = 2]

Times/days of activities were not convenient[Code = 3]

Inconvenience of commuting and returning to campus[Code = 4]

Interferes with academic obligations (e.g., studying, group work)[Code = 5]

Interferes with social commitments (e.g., going out, socializing with friends)[Code = 6]

Commitments to off-campus activities[Code = 7]

Intercollegiate athletics[Code = 8]

Unsure of how to get involved[Code = 9]

Unable to bring children/spouse[Code = 10]

I don't like to participate alone[Code = 11]

I'm too shy[Code = 12]

I don't feel accepted/events are unwelcoming[Code = 13]

There is an age difference (e.g., other students are older)[Code = 14]

There isn't anything I like to participate in[Code = 15]

Other (please specify)[Code = 16] [Textbox]

Required answers: 1

Allowed answers: 16

Display if Q99='Not at all connected'

Q101 If you could start over again, would you participate again in the Early College High School Program?

Definitely yes[Code = 4]

Probably yes[Code = 3]

Probably no[Code = 2]

Definitely no[Code = 1]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Q102 Why would you consider **not** participating in the Early College High School Program? (Check all that apply)

I do not feel it added much to my college experience[Code = 1]

It did not or will not shorten my time to degree completion (I have/will spent/spend more than 2 years at UTEP)[Code = 2]

It did not save me or my family any money[Code = 3]

I missed out on social experiences with my friends[Code = 4]

I wasn't able to participate in varsity sports[Code = 5]

I wasn't able to participate in music/theater programs (e.g., band, orchestra, plays)[Code = 6]

I wasn't able to participate in community service activities[Code = 7]

I was dissatisfied with something that happened while I was in the program[Code = 8]

I think I would have done just as well academically without it[Code = 9]

It wasn't my decision, my parents encouraged me to do it at the time[Code = 10]

I did not have the opportunity to pursue an internship or co-op[Code = 11]

I did not have an opportunity to study abroad[Code = 12]

I wasn't able to have a job[Code = 13]

Other (please specify)[Code = 14] [Textbox]

Required answers: 1

Allowed answers: 14

Display if Q101='Probably no' OR Q101='Definitely no'

Q103 If you could start over again, would you choose to attend UTEP?

Definitely yes[Code = 4]

Probably yes[Code = 3]

Probably no[Code = 2]

Definitely no[Code = 1]

Required answers: 1

Allowed answers: 1

Next Page: Sequential

Q104 Why would you consider **not** attending UTEP?

It has not lived up to my expectations[Code = 1]

I have been disappointed in my academic major/courses[Code = 2]

I have been disappointed with my ability to connect socially[Code = 3]

I would like to experience a more residential campus[Code = 4]

I should have left El Paso and experienced something different[Code = 5]

I'm concerned about my ability to find a job after graduation [Code = 6]

I don't feel like I have anything keeping me here[Code = 7]

Other (please specify)[Code = 8] [Textbox]

Required answers: 1

Allowed answers: 8

Display if Q103='Probably no' OR Q103='Definitely no'



### Appendix C: High Schools Represented by Juniors

	Type of Student
	Juniors <i>N</i> =546
High School	
Americas	44 (8%)
Coronado	42 (8%)
Franklin	41 (8%)
Hanks	35 (6%)
Silva Health	30 (5%)
Eastwood	26 (4%)
Del Valle	25 (4%)
El Dorado	25 (4%)
Montwood	25 (4%)
Bel Air	24 (4%)
Canutillo	21 (3%)
Socorro	21 (3%)
Chapin	20 (3%)
Burges	19 (3%)
Riverside	19 (3%)
El Paso	18 (3%)
Austin	15 (3%)
San Elizario	12 (2%)
Clint	11 (2%)
Horizon	11 (2%)
Bowie	10 (2%)
Mountain View	10 (2%)
Ysleta	9 (1%)
Andres	8 (1%)
Jefferson	8 (1%)
Irvin	6 (1%)
Parkland	5 (1%)
Fabens	5 (1%)

### Appendix D: Respondents Majors Categorized by College/School

	Type of Student	
	ECHS <i>N=112</i>	Junior <i>N=164</i>
College/School		
College of Business	7 (6%)	17 (10%)
College of Education	4 (4%)	9 (6%)
College of Engineering	20 (18%)	15 (9%)
College of Health Science	7 (6%)	16 (10%)
College Of Liberal Arts	35 (31%)	46 (28%)
College of Science	29 (26%)	45 (27%)
School Of Nursing	5 (4%)	14 (9%)
Other	4 (4%)	2 (1%)
Unsure	1 (1%)	0 (0%)

## Curriculum Vita

Catie McCorry-Andalis earned her Bachelor of Arts degree in Liberal Studies with a minor in English from Notre Dame de Namur University (formerly, College of Notre Dame) in 1992. The same year, she accepted her first professional position as a Resident Director and Coordinator of Orientation Programs at Marymount College located in Southern, California. In 1994, Catie accepted the position of Residence Life Coordinator for California State University, East Bay located in Hayward, California, where she remained until 1998. Having a desire to continue her education, Catie earned her Masters of Public Administration degree with an emphasis in public policy from Notre Dame de Namur University in 1997.

In 1998, Catie accepted a position as Programs and Conference Coordinator at the University of La Verne where she worked with first-generation college students through a comprehensive mentoring program. Soon thereafter, Catie accepted two new positions simultaneously, Leadership Development Coordinator at Chapman University and Special Projects Assistant at Pepperdine University. While in these positions, Catie not only enhanced existing leadership development programs and developed new ones, but also researched and prepared data analysis for University initiatives including accreditation materials, emergency response and critical incident plans, risk management programs and services and off-campus student housing programs for undergraduate and graduate students. During this time, Catie also served as the Chair of the Pacific Management Institute.

Catie's next professional position was as Director of Student Activities at Menlo College. Soon after arriving, Catie was promoted to Assistant Dean where she oversaw Career Services, Multicultural Services, and Intramural Programs in addition to Student Activities. Throughout

her time at Menlo College, Catie served as an Adjunct Professor teaching courses in subject areas such as leadership theory, law and policy and freshman experience.

In 2005, Catie accepted the position as Assistant Dean of Students at The University of Texas at El Paso (UTEP) where she oversaw Student Conduct, Student Activities and Childcare Services. In 2008, Catie was promoted to Assistant Vice President and Associate Dean of Students, responsible for Disability Services, International Services, Residence Life, Recreational Sports and Student Publications. Catie's role expanded again in 2011, when she was promoted to Associate Vice President and Dean of Students. It is while at UTEP, that Catie enrolled and completed her doctorate degree in Educational Leadership and Foundations.

Throughout her career, Catie has been active in state and national organizations including the Western Association of College and University Housing Officers (WACUHO), Texas Association of College and University Student Personnel Administrators (TACUSPA), Texas Council of Deans (TXDOS) and the National Association of Student Personnel Administrators (NASPA). Catie has presented her research and programmatic initiatives at regional and national conferences and has been recognized for her efforts in the area of student involvement and campus engagement. Throughout her career in higher education, Catie has had an interest in supporting and understanding further, ways to increase access to college for low income, first-generation students as well as how to further engage these students in meaningful activities outside the classroom that in turn increase their odds of obtaining a Bachelor's degree.

Permanent Address: Catie McCorry-Andalis  
1405 Rainbow Ridge drive  
El Paso, Texas 79912