Copyright

by

Christyn M. McCann

December 2015

AN ANALYSIS OF EDUCATIONAL ACHIEVEMENT: AN EVALUATION OF THE ADVANCEMENT VIA INDIVIDUAL DETERMINATION PROGRAM IN A MIDSIZED GULF COAST SCHOOL DISTRICT

A Doctoral Thesis Presented to the Faculty of the College of Education University of Houston

In Partial Fulfillment of the Requirements for the Degree

Doctor of Education in Professional Leadership

by

Christyn McCann

December 2015

AN ANALYSIS OF EDUCATIONAL ACHIEVEMENT: AN EVALUATION OF THE ADVANCEMENT VIA INDIVIDUAL DETERMINATION PROGRAM IN A MIDSIZED GULF COAST SCHOOL DISTRICT

A Doctoral Thesis for the Degree

Doctor of Education

by

Christyn M. McCann

Approved by Doctoral Thesis Committee:	
Dr. Angus MacNeil, Co-Chairperson	
Dr. Wayne Emerson, Co-Chairperson	
Dr. Robert Borneman, Committee Member	
Dr. Teressa Voltz, Committee Member	
	Dr. Robert H. McPherson, Dean College of Education

DEDICATION

To my adoring husband, Jason, no one could have supported me more throughout my educational journey. You have this beautiful quality of never telling me no, even when the alternative may be a better choice for me. From start to finish, your dedication to me, and my boundless dreams is unmatched. Without you and your endless love, encouragement and sacrifice, this entire journey would not have been possible. Thank you for being my biggest fan.

To my parents, Charles & Vickie, who instilled in me the belief that I could do anything I set my mind to. Your love, encouragement, and commitment to me are unfailing, and for that I could never repay you. Thank you for giving me every opportunity I could imagine and know that your unending love for me has made me who I am today.

To my brother, Jared, we have certainly come a long way, but never lost sight of who we are. When I see you, Holly, Charlee and Case, I know that I am witnessing the true meaning of why God has given us all of these gifts. Thank you for continually reminding me that the simple joys in life are what really matter.

To my both of my grandmothers, Delfina and LaVerne, and my late grandfather Charles. Your love, prayers and encouragement are what kept me going. Many times I wanted to give up, but knowing that you were praying for me never let me. That I have made you proud makes it all worth it. Without you, I know that this would not have been possible.

To my Aunt Debbie, who is always there with daily encouragement and prayers.

Every girl should have an Aunt Debbie; they just can't have mine.

The never ending love, support, and encouragement of these loved ones have been with me as I have traveled on this long, sometimes arduous, educational journey. More importantly, though, they have been the same for me throughout my life; and for that I am eternally thankful.

"For this reason, ever since I heard about your faith in the Lord Jesus and your love for all the saints, I have not stopped giving thanks for you, remembering you in my prayers."

Ephesians 1:15-16 New Living Translation

ACKNOWLEDGEMENTS

The path to completion of this project has been one of self-development. There has been an immeasurable amount of support from family, friends, and colleagues. This support is what kept me going, even when it seemed that the end would never be in sight. The blessings that I have received along the way gave me the confidence to continue and the determination to finish.

My family and friends have never given up on me, even when I may have been close to giving up on myself. Thank you just does not seem to be enough. To my cousin, Delaina, while we are practically sisters, I know that God placed you in an even more prominent place in my daily life so that your joy and laughter could get me through the toughest of times in this process. To my Uncle Darrell who has always been so proud of his favorite niece, thank you for always thinking of me. To my mother and father-in-law, Gene and Diane, thank you for always asking me about the process and being excited for me to finish. Thank you both for always supporting me like I am your own; you are truly a second mother and father to me.

To one of my dearest friends, Rene, like a true coach, you never let me tap out of the game. Your love, encouragement, and calculated measure of asking me about my paper every time we talked helped push me through. When you started your doctoral program, I knew things were serious. God had a reason for placing you in the office down the hall, and I am so thankful.

A special thanks goes to Dr. Wayne Emerson for seeing me through this process and for reminding me that a dissertation takes time. Sincere gratitude goes to Dr. Angus MacNeil and Dr. Robert Borneman for your feedback and support.

To Dr. David Villareal, thank you for staying with me through the process. Your patience, dedication, and concern have been invaluable. I am eternally grateful for your commitment to my success.

Thank you to Cohort Number Two for the relationships and friendships that were built during our time together. My unending gratitude goes to my dear friends Dr. Mindy Muñoz and Dr. Teressa Voltz. I am grateful that we were able to take this journey together, even if I was a little slower in getting to the finish line. You both were my rocks for every stage of this process, and I only hope that I was the same for the two of you.

This process has been a spiritual journey for me. I have come closer to knowing who I am and what my purpose is. While I know that this will be ever changing, I am thankful that I have such special people in my life to support me along the way.

"I press on toward the goal to win the prize for which God has called me heavenward in Christ Jesus."

Philippians 3:14 New Living Translation

AN ANALYSIS OF EDUCATIONAL ACHIEVEMENT: AN EVALUATION OF THE ADVANCEMENT VIA INDIVIDUAL DETERMINATION PROGRAM IN A MIDSIZED GULF COAST SCHOOL DISTRICT

An Abstract of a Doctoral Thesis Proposal Presented to the Faculty of the College of Education
University of Houston

In Partial Fulfillment of the Requirements for the Degree

Doctor of Education in Professional Leadership

by

Christyn M. McCann

December 2015

McCann, Christyn M. "An Analysis of Educational Achievement: An Evaluation of the Advancement Via Individual Determination Program in a Midsized Gulf Coast School District." Unpublished Doctor of Education Thesis, University of Houston, December, 2015.

Abstract

Students with academic potential often fall victim to the achievement gap. These students show academic aptitude on acheivement test scores, but they lack the unwritten academic skills and practices to achieve success in rigorous curriculums such as Advanced Placement and Dual Credit courses. Academic frustrations can lead to increased absentee rates, higher disciplinary referrals, and increased drop out rates. Advancement Via Individual Determination (AVID) is a program designed to recognize students who have academic potential. AVID students are enrolled in an elective course that occurs in their daily schedule, and provides students with educational supports to attain academic achievement. Through this program, students are entrenchend in academically rigorous, college preparatory courses and AVID curricula that will lead to completion of four-year college and university entrance requirements. The purpose of this study is to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. The evaluation of the AVID program was conducted using the theoretical framework of the CIPP Model for Evaluation. Archival data was used to determine what effects four-year enrollment in AVID had on student achievement. Measures of student achievement were defined as average daily student attendance, disciplinary referrals, academic achievement through grade point averages, college credits that students earn in Advanced Placement and Dual Credit courses, Exit Level Texas Assessment of Knowledge and Skills (TAKS)

scores, and graduation rates. This evaluation found that AVID students had a better average daily attendance rate, a lower number of students who received disciplinary referrals, and a lower number of disciplinary referrals received when compared to matched-paired, non-AVID students. AVID students had a higher median grade point average, and subsequently, a more desirable average class rank. AVID students enrolled in more Advanced Placement courses than the matched-paired, non-AVID student group but earned less college credit through Advanced Placement examinations. AVID students earned more college credit through the Dual Credit program. AVID students outperformed the matched-paired, non-AVID student group on the initial administration of the Exit Level TAKS test; however, the matched-paired, non-AVID student group had a greater percentage of students earning commended scores on three of the four assessments of the Exit Level TAKS. AVID students had a higher graduation rate than the matched-paired, non-AVID student group and had more students graduate as part of the Recommended High School Program and Distinguished Achievement Program.

TABLE OF CONTENTS

Chapt	ter	Page
I.	INTRODUCTION	1
	Achievement Gaps	2
	Federal Accountability	3
	Changing Demographics	4
	Statement of the Problem	
	Need for the Study	
	Purpose of the Study	
	Significance of the Study	
	Research Questions	
	Definition of Terms	
	Summary	19
II.	LITERATURE REVIEW	22
	Introduction	22
	Federal Mandate	23
	Closing the Achievement Gap	26
	Advancement Via Individual Determination	31
	AVID Curriculum	38
	The AVID Process	41
	Data Collection	45
	The Essential 11	46
	AVID Holistic Approach	
	College Readiness	
	Attendance	
	Discipline	
	Sense of Belonging	
	Tutoring and Inquiry in the AVID Program	
	Course Enrollment	
	College Preparatory Course Enrollment	
	Graduation Programs	
	Theoretical Framework	
	Summary	78
III.	METHODOLOGY	80
	Introduction	
	Problem and Purpose Overview	
	Participants	
	Study District and Instructional Environment	
	Data Collection Procedures	
	Research Questions	
	Instrumentation	
	Student Attendance	93

Chapter		Page
	Disciplinary Referrals	93
	Grade Point Average	93
	Advanced Placement and Dual Credit Course Enrollment and Co.	
	Credits Earned	94
	Texas Assessment of Knowledge and Skills	95
	Graduation Rates	
	Data Analysis Procedures	98
	Ethical Assurances	98
	Summary	98
IV.	RESULTS	99
	Research Question One	100
	Research Question Two	103
	Research Question Three	106
	Research Question Four	109
	Research Question Five	115
	Research Question Six	119
	Summary	128
V.	DISCUSSION	129
	Review of Theoretical Framework	129
	Summary of the Study	130
	Review of Methodology	131
	Discussion of Findings	
	Review of Evaluation Findings	133
	Study Limitations	137
	Implications for Educational Practice	139
	Implications for Future Research	141
	Conclusion	
REFERE	ENCES	146

APPENDICES

Appendix		Page
A.	Approval of Application to Conduct Research in a Midsized Gulf Coast School District	169
B.	Approval by the University of Houston Committee for the Protection of Human Subjects to Conduct Research	171

LIST OF TABLES

Table		Page
1	Average Daily Attendance	102
2	Average Amount of Disciplinary Incidents- AVID & Non-AVID Students	105
3	Grade Point Average	107
4	Number of Graduates in the Top 10 Students of Graduating Class	108
5	Average Class Rank	109
6	Comparison of Percentage of Students Taking One or More Advanced Placement Courses	111
7	Comparison of Number of Advanced Placement Courses Taken	112
8	Comparison of Advanced Placement Exams and College Credit Earned	114
9	Comparison of Percentage of Students Taking One or More Dual Credit Courses	116
10	Comparison of Dual Credit Course Enrollment and College Credit Earned	118
11	Comparison of AVID Students and Non-AVID Students Meeting Passing Standard on Spring 2010 Exit Level TAKS	121
12	Comparison of AVID Students and Non-AVID Students Passing with Commended on Spring 2010 Exit Level TAKS	123
13	Comparison of AVID Students and Non-AVID Students Percentage of Graduates Based on Graduation Dates	125
14	Comparison of AVID Students and Non-AVID Students Graduation Program Endorsements	127

LIST OF FIGURES

	Page
Completion of Four-Year College Entrance Requirements	10
Completion of Four-Year College Entrance Requirements Ethn	icity12
National and State AVID Program Demographics 2007-2011 C	ohort 34
AVID Texas and United States Economically Disadvantaged Po 2007-2011 cohort	_
WICOR	39
AVID Student Demographics 2010-2011	83
Non-AVID Student Demographics 2010-2011	84
AVID Student Population by Groups 2010-2011	85
Non-AVID Student Population by Group 2010-2011	86
Matched Group Student Demographics 2010-2011	87
Matched Group Student Population by Groups 2010-2011	88
Standard ISD Student Demographics 2010-2011	90
Standard ISD District Population by Groups 2010-2011	91

CHAPTER ONE

INTRODUCTION

A school's success is based on many factors including student performance as measured by state assessment, attendance, graduation rate, and the citizenry of its students. According to the No Child Left Behind Act of 2001, public schools throughout the nation are evaluated for Adequate Yearly Progress (AYP) (TEA, 2013). Publicly funded districts and campuses are scored based on Reading/Language Arts and Mathematics state assessment scores, average daily attendance rates, and Graduation/Completion Rates at the secondary level (TEA, 2013). While a school may have many high performing students, the fact is that there will always be students that fall behind academically but prove to have academic potential evidenced in such factors as state assessments and teacher recognition.

Beginning early in the 20th century, public high schools began taking youth from various backgrounds and prepared them for the work force, college admission, and in the importance of citizenship (Grubb & Lazerson, 2013). The intent was to take school aged children set to work in factories; hailing from different home lives, economic backgrounds, and varying educational goals, and meld them into a school that would meet their educational needs, while giving them options beyond industrialized work at a young age. This model provided opportunities for youth to persevere, through what was perceived as hardship, to obtain their goals. This allowed young children to propel ahead of their peers through schooling (Grubb & Lazerson, 2013). In melding all of these various learners together, assumptions and discriminations formed. These assumptions and discriminations overtly pushed both male and female students of

varying socioeconomic statuses and ethnicities to particular educational paths that often limited student access to highly rigorous, college preparatory course work (Grubb & Lazerson, 2013). Students who may have been at an academic deficit because of income instability, being from families of recent immigrants or undocumented migrant workers, or who previously lacked exposure to highly rigorous coursework, may often have found themselves among the group of students who have academic potential but have difficulty succeeding academically.

Achievement Gaps

The students who have academic potential but lack success in the classroom are often the starting point for the achievement gaps that plague schools. Achievement gaps present themselves in many educational areas including standardized test scores, students' course grades, campus and district accountability ratings, student dropout rate, and students' college readiness upon graduation (Editorial Projects in Education Research Center, 2011). The achievement gap most often refers to disparaging performance differences between African-American and Hispanic students and their non-Hispanic White peers (Editorial Projects in Education Research Center, 2011). Academic performance differences can also be seen between students from low income, economically instable homes compared to students who have more socioeconomic stability (Editorial Projects in Education Research Center, 2011). Students falling victim to mediocrity find that their lack of educational ability poses a significant problem for postsecondary opportunities, and subsequently, postsecondary success. No longer are careers and postsecondary opportunities, once reserved for American students, available solely for American students in the global marketplace. In order to earn sustainable

wages and have an adequate career, a student's educational prowess must include post-secondary plans (Daggett & Pedinotti, 2005; Franklin, 2011; Friedman, 2005; Jukes & McCain, 2001). The Advancement Via Individual Determination (AVID) program's mission is "to close the achievement gap by preparing all students for college readiness and success in a global society" (AVID, 2015a, para. 1).

Federal Accountability

The No Child Left Behind Act (NCLB) of 2002 created a federal mandate that required school districts to find and create ways to close achievement gaps between high performing and low performing students from various ethnic backgrounds, socioeconomic statuses, and academic ability groups (Public Law (NCLB), 2002). Federally funded schools were required to analyze disaggregated data and focus on student performance data based on similar student groups. NCLB emphasized the need for early interventions as a key to success for those students or student groups who were found to be behind academically (Fletcher & Vaughn, 2009; Voltz, 2012).

Student academic success is crucial to a school's federal accountability rating.

Federally, a school district and campus's accountability is measured by Adequate Yearly Progress or AYP. Mandated by the Elementary and Secondary Education Act (ESEA), AYP at the secondary level measures each district and campus's Reading/English Language Arts and Mathematics assessment scores, and Graduation/Completion Rate (TEA, 2013). Student groups within the campus and district are evaluated for state assessment success and analysis of high school completion rate. Student groups that factor into AYP are comprised of a minimum number/percentage of students based on ethnicity, federally funded educational services received, and economic status.

In years prior to 2012, Texas assessed students through the Texas Assessment of Knowledge and Skills (TAKS). Students' scores on their tenth grade TAKS Mathematics and Reading/English Language Arts tests were used as part of the formula to determine a school and district's AYP rating. In 2012, the TAKS transitioned to the State of Texas Assessment of Academic Readiness (STAAR) test to become the new accountability measure (TEA, 2013). There were three AYP distinctions that campuses and districts received: (1) *Meets AYP*, indicating that a campus or district met the standards in all measured indicators; (2) *Missed AYP*, indicating that a campus or district did not meet AYP in one or more of the standards; and (3) *Not Evaluated*, indicating that the campus or district was not evaluated (TEA, 2009).

Changing Demographics

The last decennial census estimated the population of Texas at 25,145,561, an increase of 4,293,741 in a 10-year time span (Texas Department of State Health Services, 2013). In 2010, 5,693,241 or 22.64% of the population was between the ages of five years to 19 years, the general age range of school age children for compulsory education. Enrollment in Texas public elementary and secondary schools in the fall of 2011 was 4,933,617 (TEA, 2011b). Texas public elementary and secondary school enrollment was second only to California's public elementary and secondary school enrollment. The national public elementary and secondary school enrollment in the fall of 2010 was 49,484,181 (NCES, 2015). Texas accounted for 9.97% of the national public elementary and secondary school enrollment. With almost a quarter of the state's population attending school, and accounting for almost a tenth of national public and elementary

school enrollment, it was imperative that students' needs were met by programs designed and implemented to close the achievement gap.

The United States Census Bureau and the office of the State Demographer in Texas made predictions for future changes in population based on previous growth trends. Many specific ethnic population measurements play distinctively important roles in shaping public education in Texas. Based on the 2010 decennial census, it was estimated that the state's population would increase 14.59% by 2020 (Potter & Hoque, 2014). Persons under the age of 18 were predicted to comprise 26.8% of the population in 2012, but it was also predicted to be the slowest growing age group between 2010 and 2050 (Potter & Hoque, 2014; US Department of Commerce, 2013). Persons claiming African American or Black alone would increase by 13.44% in 2020 and 40.84% by 2050 when compared to the 2010 census. Growth was also projected in those residents claiming Hispanic or Latino origin, specifically a growth of 26.46% by 2020 and 127.42% by 2050 when compared to the 2010 census (Potter & Hoque, 2014; US Department of Commerce, 2013). The largest increase in population compared to the 2010 census data was predicted in those individuals who identify as Other, non-Hispanic origin. This population group was predicted to increase by 32.20% in 2020 and 161.00% by 2050 when compared to the 2010 census data (Potter & Hoque, 2014).

Nationally from 2007-2011, the average household had approximately of 2.79 people and earned an average income of \$50,920. The poverty rate in the state of Texas was 17.0% compared to 14.3% nationally (US Department of Commerce, 2013). Between 2007-2011, Texas had an average of 16.2% foreign-born persons (12.8% nationally); 34.8% of residents spoke a language other than English (12.8% nationally);

80.4% graduated from high school based on the number of people 25 or older (85.4% nationally); and 26.1% of Texans earned a Bachelor's Degree or higher (28.2% nationally) (US Department of Commerce, 2013).

Statement of the Problem

High school is one of the most critical periods in a student's educational experience. Faced with peer pressure; outside influences; uncertainty about the future; graduation; and adulthood, students are prone to detach from their studies and focus on what is happening around them and offered to them. Many times, there is not an intervention program to meet the needs of students who have difficulty expressing their needs, and students may not recognize that they are in need of educational assistance. Underperforming students may be first generation college students. These students may have various discipline issues and often lack direction. Students who enter school underprivileged often leave school underprivileged (Martinez, 2013).

AVID helps a campus to make a commitment to college readiness for all students. The AVID program builds an awareness of college programs among staff, students, and parents. Through the curriculum, AVID assists teachers in recognizing students' knowledge deficits, works to help students set goals collaboratively, and monitors both parties' goal achievement. AVID works for the college readiness of the "forgotten majority": the high need, low income, and often ethnic minority students. AVID is a program that targets students in fourth through twelfth grade who exhibit potential to succeed in a college preparation program, but they have limiting factors to accomplish this goal. The factors that limit the success of these students may be out of their control, such as low household income, previous academic deficiencies, varying racial origins,

and language deficiencies (Roberts & Scott, 2009). These factors lead to more intensive needs in a postsecondary setting. A 1995 study, *High School and Beyond*, found that more than 60% of students entering community college needed to take a remedial course because of academic deficiencies. This study showed that remediation for students entering community college and four-year universities was required at a rate of 40% (Tuma & Geis, 1995).

What students do after they exit high school and transition into adulthood often determines their level of societal and cultural interdependence. Career fields require more in-depth understanding of all fundamental academics. The nation has seen enrollment of students from varying ethnic backgrounds, primarily students of African American and Hispanic origin, increase in compulsory education. Likewise, the increase in enrollment was reflected in four-year colleges and universities, but the completion rate of these students with a four-year degree was considerably less than their Caucasian peers (Snyder, Dillow, & Hoffman, 2009). Nationally, only 13% of Hispanic students and 20% of African American students graduated from college (Snyder et al., 2009).

Achievement gaps have plagued education for many years. Achievement gaps persist not only between racial groups but also between socioeconomic factions. In more recent history, achievement gaps have been studied between genders, academic ability groups, language deficiencies, and college success rate (Editorial Projects in Education Research Center 2011).

In 2001, Kati Haycock reported that one out of 50 Hispanic or Latino students, and only one out of 100 African American students could read and comprehend specialized information after high school (Haycock, 2001). It was noted that by the time

African American and Latino students finish high school "they have skills that are the same as those of White students in the eighth grade" (Haycock, 2001). Haycock recognized, "Significant differences also persist in the rates at which different groups of students complete high school" (Haycock, 2001). Haycock compared African American and Latino academic performance to be comparable to one out of 12 White students that could read and comprehend specialized information as they completed high school (Haycock, 2001). In 2011, a study conducted by the Annie C. Casey Foundation discovered children who have a low socioeconomic status and read below grade level by third grade have a three times greater likelihood of not graduating from high school compared to students who have never been subject to poverty (Annie E. Casey Foundation, 2011; Editorial Projects in Education Research Center, 2011; Hernandez, 2011).

Progress has been made in course taking patterns of all student groups revealing students are taking more courses to graduate compared to years passed, despite continued challenges faced in closing achievement gaps (Editorial Projects in Education Research Center, 2011). No longer are the majority of students taking the minimum number of courses to graduate. However, when assessing rigorous course taking patterns, African American and Hispanic students trailed White and Asian students who were twice as likely to take more rigorous courses as part of their path to high school graduation. Creating less disparity among achievement in different academic groups has been virtually unobtainable (Editorial Projects in Education Research Center, 2011).

Even faced with achievement gaps, the goal of every high school is to graduate every one of their students within a four-year period of their high school career

matriculating. Unfortunately, schools do not always accomplish this goal. Many students often fall behind in their academics. Some students detach from school, feeling that they do not have an advocate for their success. These students often fail in achieving higher education readiness standards at the time of graduation. While they may pass tests that acknowledge acquisition of basic knowledge and skills, they may not achieve such success on college entrance exams (i.e., ACT and SAT). In 2007-2008, approximately 30% of first-year college students across the nation took at least one remedial course upon enrolling in college (National Center for Educational Statistics, 2013). Scores on college entrance exams, coupled with the quality and intensity of coursework, are major predictors of success in college, with emphasis being placed on the quality and intensity of coursework in high school (Adelman, 1998).

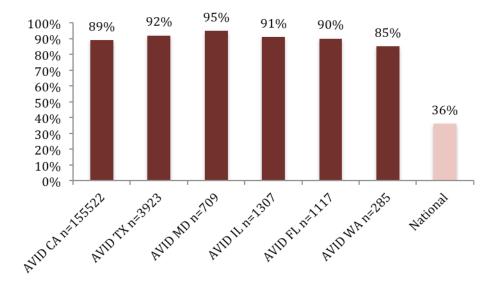
Kati Haycock's *Closing the Achievement Gap*, reported that, "In the 18 to 24 year old group, about 90 percent of Whites and 94 percent of Asians have either completed high school or earned a GED [in 1999]" (Haycock, 2001, para. 15). However, when analyzing African American students' data, the number decreased to 81% of this age group earning a high school diploma or GED and falls even further to 63% of Latinos earning a high school diploma or GED (Haycock, 2001).

AVID, a research-based program, provides a means to target students that fall victim to the achievement gap. AVID provides a rigorous curriculum to chosen students who demonstrate academic potential, but have not been afforded the support structures and intervention programs to be successful (Roberts & Scott, 2009). The program allows the AVID teacher to implement curriculum, activities, and methodologies that support students through academically rigorous, college preparatory courses (Roberts

& Scott, 2009). AVID is a whole school achievement reform program. Figure 1.1 illustrates that AVID students are completing four-year college entrance requirements at a higher percentage than the national average. As indicated by AVID in Figure 1.1, 36% of students nationally completed four-year college entrance requirements. AVID students in California (15,552) completed four-year entrance requirements at a rate of 89%. AVID students in Texas (3,923) completed four-year entrance requirements at a rate of 92%. AVID students in Maryland (709) completed four-year entrance requirements at a rate of 95%. AVID students in Illinois (1,307) completed four-year entrance requirements at a rate of 91%. AVID students in Florida (1,117) completed four-year entrance requirements at a rate of 90%. AVID students in Washington (285) completed four-year entrance requirements at a rate of 85% (AVID Center, 2013e).

Figure 1.1

Completion of Four-Year College Entrance Requirements



Source: AVID Center, 2013, Data and Results

Figure 1.2 shows that AVID students, by ethnicity, are completing college entrance requirements at a higher rate than the national average. Figure 1.2 indicates that 82% of American Indian and Alaskan Native AVID students completed four-year college entrance requirements compared to 21% across the United States. Nationally, 92% of Asian AVID students completed four-year college entrance requirements compared to 49% in the U.S. overall. Ninety-two percent of Black or African American AVID students in the U.S completed four-year college entrance requirements compared to 25% nationally. While Filipino students four-year college entrance requirements were not studied for the U.S. overall, 90% of Filipino AVID students completed four-year college entrance requirements. Ninety percent of Hispanic or Latino AVID students completed four-year college entrance requirements, but only 22% of Hispanic or Latino students in the U.S. overall completed four-year college entrance requirements. Ninety-one percent of AVID students who classified their ethnicity as "Other" completed four-year college entrance requirements; however, the study of an "Other" ethnicity classification for the U.S. as a whole was not included in this dataset. Ninety-two percent of AVID White (not Hispanic) students completed four-year college entrance requirements compared to 39% in the U.S. When looking at the total numbers, 91% of AVID students in the U.S. completed four-year college entrance requirements compared to 36% of U.S. students overall (AVID Center, 2013e).

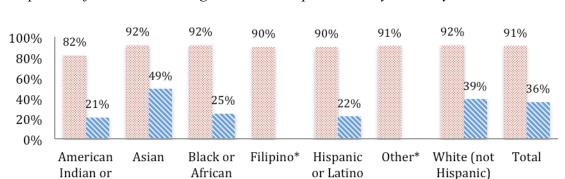


Figure 1.3

Completion of Four-Year College Entrance Requirements by Ethnicity

American

Alaskan

Native

■ AVID U.S. ■ U.S. Overall

Note. ^aAVID Senior Data Collection, Study of 33,204 AVID Seniors (2011-2012), ^{b*}Filipino and Other not classified in this study

Source: AVID Center, 2013, AVID College Readiness System: An Overview

Since schools are responsible for implementing intervention strategies that provide academic and behavioral supports to students prior to being identified as eligible for special education services (Fletcher & Vaughn, 2009; IDEA, 2004; Shinn, 2007), AVID is a natural fit for providing these supports to students at the secondary level. Similar to the Individuals with Disabilities Education Act (IDEA), NCLB encourages interventions for students using research-based interventions (Fletcher & Vaughn, 2009). The key is to work with students in an intensive manner that will encourage success and reduce the risk of failure, which will make the likelihood of future educational success and fortitude strong.

AVID is an elective course which students are selected for potential participation based on an AVID score. The AVID score is derived from a combination of a student's grade point average (GPA), a student's standardized test scores, parents who have or

have not attended college (information obtained from a student questionnaire), and teacher recommendations. After selection has occurred, students are invited to complete an application and to participate in an interview that is conducted by the campus AVID site team. Once the site team has conducted the interview, selection of student participants are made and students are scheduled for the AVID elective course. The AVID class occurs during their daily academic schedule as an elective course that counts towards graduation as a state credit. If a student is enrolled in an AVID course for the four-year sequence, the fourth year of AVID is counted as an advanced credit.

Need for the Study

In accordance with the No Child Left Behind Act of 2001, Section 1111 (b)(F), states are responsible for developing a timeline to determine Adequate Yearly Progress. In addition to the development of the timeline, states must ensure that there are academically rigorous content standards and challenging student achievement standards that apply to all schools and children in the state (U.S. Department of Education, Sec. 1111.State Plans. (b)(1)(A), 2012). Adequate Yearly Progress measures these requirements as well as others, such as graduation rates, grade-to-grade retention rates, and attendance rates, as determined by the state accountability system.

These standards are to include all students and are measured in subcategories as determined by No Child Left Behind Section 1111 (C)(v) including: economically disadvantaged students; students from major racial or ethnic groups; students with disabilities; and students with limited English proficiency, all of which must be statistically significant in number to produce reliable information (U.S. Department of Education, 2012).

Standard ISD, a pseudonym, adopted the AVID program into their high schools with the belief that the program would improve grade point averages, academic rigor, attendance rates, and high school completion rates for those students who were statistically predicted to be at-risk in one or more of these categories. Without an intervention program, it was predicted that the Adequate Yearly Progress within Standard ISD would be in jeopardy. In essence, these students, which had been chosen for the AVID program and elected to enroll, would predictably struggle in high school, be lower performing than their peers on standardized tests, have lower attendance, and lack college readiness upon high school completion without a targeted academic intervention.

Failure to create a method to identify students' educational difficulties and choosing not to implement an ongoing, student-specific, targeted intervention plan that is steeped in research would result in many students being lost in the middle as they progressed through their educational experience (Fuchs & Fuchs, 2006; Tomlinson, 2003; VanScriver, 2005; Voltz, 2012). AVID was adopted as a model for identifying and remediating students' academic deficiencies. By implementing research-based curriculum methods, AVID would become a quality intervention program that provided services and continuing support for the individual student beyond high school. A successful intervention plan over time mines a student's maximum potential beyond the current setting to plan for future endeavors such as college or a career environment (Lose, 2007). With AVID, the intended outcome was that the AVID students would outperform their peers in high school and in their future ventures.

Purpose of the Study

The purpose of this study was to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. This study compared archival data of students who participated in the AVID program from 2007-2011 to those students who did not participate in AVID. Archival data was analyzed for the 2007-2008, 2008-2009, 2009-2010 and 2010-2011 school years to determine if students in the AVID program of Standard ISD performed better than their non-AVID peers.

Descriptive statistics were used to measure AVID student success and achievement compared to non-AVID students. The researcher analyzed data of those students who maintained four-year enrollment in the AVID program compared to those students who were not enrolled in the AVID program in the midsized Gulf Coast school district studied. Measures of student achievement were defined: (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

Significance of the Study

This study will provide administrators with results regarding the achievement of the AVID program's goal of improving student performance. This study evaluated the AVID program over a four-year period and quantified the success of AVID through the students who entered Standard ISD's program beginning in the ninth grade (2007-2008)

and exited upon graduation (2010-2011). This study compared AVID students to non-AVID students in a midsized Gulf Coast school district.

The results of this study will provide districts that implement AVID with evidence of whether differences exits between those students enrolled in the AVID program and those students who did not. Districts will have an additional piece of contextual information for determining if AVID is an intervention program that makes strides in closing the achievement gap. The descriptive statistics used in the study analyzed the achievement data of students who maintained four years of enrollment in the AVID program and determined if enrollment in AVID led to a higher academic success rate than those students who did not enroll in AVID. Should the data suggest that there is no benefit for four-year AVID enrollment, actions can be taken to improve student intervention programs. Ethically, districts should not wait for students to fail before they intervene (McEneaney et al., 2006; Voltz, 2012); however, the district should constantly evolve and implement programs based on specific student needs.

Through the information provided, district administrators, decision makers and stakeholders will have information to assess when choosing to implement an AVID program. Meeting the needs of struggling learners and increasing access to a rigorous curriculum are just a few perils of closing the achievement gap. AVID is a program that promises to do that. This study provides information that can be reviewed prior to implementation. This study analyzed and evaluated the AVID program of a midsized Gulf Coast school district by answering several questions as they relate to the AVID program's effect on those enrolled.

The specific research questions for this study are:

- 1. Do AVID students have higher average daily attendance than non-AVID students?
- 2. Do AVID students receive less disciplinary referrals than non-AVID students?
- 3. Do AVID students earn higher grade point averages than non-AVID students?
- 4. Do AVID students earn more college credits through the Advanced Placement program than non-AVID students?
- 5. Do AVID students earn more college credit through the Dual Credit program than non-AVID students?
- 6. Do AVID students have higher graduation rates than non-AVID students?

Definition of Terms

The following terms are used throughout this study. Their definitions provide clarification for the purpose of the research:

Academic Middle is a term used to describe students who typically have passing state test scores but have fallen off the college preparatory track, are not enrolled in academically rigorous courses, and are not achieving their full academic potential.

Advanced Placement (AP) is curriculum and examinations provided to high school students at the college level so that students may earn college credit in courses based on examination scores.

Advancement Via Individual Determination (AVID) is an intervention program that targets students who are seen to have academic potential but are among underperformers prior to selection. AVID students are typically middle to lower class

students who, academically, may be the first in their family to attend college and would benefit from strong academic supports in academically rigorous classes.

Class rank is the numerical placing that a student earns based on their GPA in comparison with other classmates.

Distinguished Achievement Program is a graduation commendation that signifies a high school student, upon graduation, has completed 26 course credits and includes either two additional math or science credits, and advanced measures. It could also include a fourth credit in math, with Algebra II as a prerequisite (Texas Education Agency Accountability Manual, 2008).

Dual Credit (DC) is a curriculum program provided to high school students through concurrent enrollment in high school and college level courses and allows the student to earn college credit based on end-of-course scores.

End-of-year attendance is the average daily attendance of a student or group of students based on one school year.

Essential 11 are the 11 core practices that comprise the AVID program. These 11 practices are used as standards to be measured for certification through the AVID Center.

Grade Point Average (GPA) is an average of point values assigned to courses based on the letter grade that a student has earned over a specific period of time.

Recommended High School Program is a graduation commendation that signifies a high school student, upon graduation, has successfully completed 26 course credits. A student is required to earn two years of a foreign language, one credit of physical education, one credit in a fine arts course, and a half credit of speech as part of the 26 credits.

Socratic Method is a critical thinking method of learning using questions. When practicing the Socratic Method, students are led to answer questions through thought provoking questions that require students to rely on previous knowledge (Paul & Elder, 1997).

Texas Assessment of Knowledge and Skills (TAKS) was implemented in the spring of 2003 as a statewide assessment for accountability for students in grades 3-12 in the core academic subject areas, ending with those students who entered the ninth grade on or before August 1, 2010.

Tutorology is the title of the tutoring method used by AVID in the AVID class for bi-weekly tutoring sessions. Tutorology, as a practice, is using inquiry-based methods to lead a student to answer their own question through reliance on previously acquired knowledge.

Summary

AVID is an intervention program designed to assist students in the "academic middle" to achieve the educational success that they have the propensity to reach. This success is reached by implementing and teaching specific educational strategies for students who were selected to be in the program and ultimately chose to accept their admission. Students who have academic difficulties, but aren't quite failing, have been historically underserved by the lack of targeted intervention and support programs aimed at helping them to achieve academic success. The students who land between the high academic achievers and those that underachieve create the achievement gaps that have plagued American education. Historically, these students are from demographic groups that are not part of the majority population, often are socioeconomically challenged, and

do not have a college-bound atmosphere at home. Many parents of these students have not attended college. Moreover, teachers of students who do not fail, but are not the top of the class, often overlook their academic potential and simply give these students the work that meets status quo instead of offering an academically rigorous curriculum.

AVID's selection criteria focuses on students who fall into the in between of academic achievement and who exhibit academic potential.

Students who are selected for AVID are placed in a course that occurs within the academic day with an AVID teacher trained in the program's methodologies.

Throughout the course, AVID students are provided with tutorial sessions that are conducted by trained tutors twice per week. The methodologies of study and practice used by the AVID teacher are taught and approved by the National AVID Center. In addition to the AVID course, students are enrolled in college preparatory coursework through a series of pre-Advanced Placement and Advanced Placement courses.

Academic supports are provided inside and outside of the AVID classroom to ensure student success in more academically rigorous coursework.

This study evaluated the AVID program over a four-year period and quantifies the success of AVID by exploring academic records of students who entered Standard ISD's program beginning in the ninth grade (2007-2008) and exited upon graduation (2010-2011). The AVID students were compared to students not participating in AVID for the same time frame. Descriptive statistics were used to analyze student academic achievement through measures of: (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement exams

and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

CHAPTER TWO

LITERATURE REVIEW

Introduction

A one-size-fits-all institution designed for the 21st century cannot serve the different needs of all young people well in the new era (Pennington, Murray, & Tucker, 2003). In order for the youth of America to compete in a global economy, all students, not just a selected few, need to have both intellectual abilities and inner resources to be successful (Franklin, 2011). The purpose of this study was to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district, through program evaluation. Archival data over a four-year period was evaluated and examined for the effectiveness of the AVID program for those students who were selected and accepted enrollment into the program compared to their non-AVID peers. Program success was determined by using percentages and frequencies to describe academic achievement as measured by (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

AVID students are perceived to have academic potential, but without the AVID program and practices, they would lack the scholastic skills to be successful in those courses that prepare them for college and the global educational marketplace. Through this study, the researcher analyzed data pertaining to those students who entered the AVID program in the 2007-2008 school year and exited upon graduation at the end of the

2010-2011 school year, thus maintaining four-year, continuous enrollment in AVID. The researcher compared AVID students to those students who were never enrolled in AVID for the same time frame (non-AVID students). This chapter reviews literature surrounding the Advancement Via Individual Determination Program, including the history of AVID and its implementation as an intervention program in school districts across the nation and in Texas.

Federal Mandate

Shifting demographics have led to the need for a change in the strategies of educating students. Since the 2000 census, the population has shifted dramatically. At the time of the 2010 census, Texas's population was 25,245,561 (Potter & Hoque, 2014). According to the census, 11,397,345 people identified as non-Hispanic White, 2,886,825 identified as non-Hispanic Black, 9,460,921 identified as Hispanic, and 1,400,470 identified as non-Hispanic Other (Potter & Hoque, 2014). Based on projections of the state demographer of Texas, 2020 will bring a population increase of 3,667,721 residents and 15,357,188 by 2050 (Potter & Hoque, 2014). This means that with potential migration patterns considered and past population trends, there will be approximately 28,813,282 residents in Texas by 2020 and 40,502,749 by 2050 (Potter & Hoque, 2014).

An increase in residents guarantees a tremendous change in various demographic measures for the state and changes in educational practices to increase student success. By 2020, Texas is projected to have 11,963,951 residents that identify as Hispanic (Potter & Hoque, 2014). This will be a 2,503,030 predicted increase in Hispanic residents compared to an increase of 387,913 residents that identify as non-Hispanic Black, 450,939 that identify as non-Hispanic Other, and only a 325,839 increase in the number

of residents that identify as non-Hispanic White (Potter & Hoque, 2014). The trend of changing demographics continues into 2050 where the non-Hispanic White residents are actually expected to decrease by 131,974 compared to the 2010 census, while the non-Hispanic Black population is expected to increase by 1,178,932, the Hispanic population is expected to increase by 12,055,441, and those residents that identify as non-Hispanic Other are expected to increase by 2,254,789 based on the same comparison to the 2010 census (Potter & Hoque, 2014).

Based on projections, many demographic measures will change in the state of Texas between the 2010 census and 2050. By 2020, the Hispanic population in Texas is expected to exceed the Anglo population, will become the majority population by 2042, and is projected to increase by 2.3 times that of the 2010 census by 2050 (Potter & Hoque, 2014). However, the fastest growing demographic group of individuals are those residents that identify as non-Hispanic Other. This group of individuals will increase by a projected 2.5 times that measured on the 2010 census (Potter & Hoque, 2014). Each of these measures reflects not only a change in the general population of the state but also that of school-aged children. Population projections have allowed school districts to make determinations in educational programs and practices that relate to the education and academic success of all students.

The 1964 adoption of the Elementary and Secondary Education Act (ESEA) and the 2001 reauthorization of ESEA with the No Child Left Behind (NCLB) Act, Title 1, outlined the imperative nature of ensuring "all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments"

(Public Law (NCLB), Section 1001, 2002 para. 1). The federal government, through a school district's Adequate Yearly Progress (AYP) rating, measures the effectiveness of academic programs to ensure fair and equal education for all students. In essence, NCLB measures effectiveness through testing, chooses the methodologies for scoring effectiveness, outlines progress timelines, and assigns the specific consequences if the school or district fails to meet the criteria (Wenning, Herdmanm, Smith, McMahon, & Washington, 2003).

Title I of NCLB dictates choice for parents when schools are rated unacceptable. When a school fails to provide a high quality education and rates academically unacceptable, alternatives are offered to ensure that students receive a high quality education (Public Law (NCLB), Section 1001 (4), 2002). According to Pennington, Murray, and Tucker (2003), challenges for school districts arise from many things, specifically from the changing economics and demographics of past years. A decrease in economic support and an increase in minority student populations, combined with accreditation requirements such as ensuring that high school students graduate and are prepared for college without the need of remediation, create an even bigger challenge for school districts (Pennington et al., 2003).

Accountability measurements can be very daunting for districts and states. However, raising expectations and a clear accountability system have allowed Texas to make progress in closing the achievement gap among underprivileged students and their wealthier peers. This can also be said for students who represent the ethnic minority compared to their Anglo peers (Navarro & Natalicio, 1999).

Students come to school with inherently different issues and ways of learning, and research suggests that students learn differently (Tobin & McInnes, 2008). Teachers often want students, regardless of their achievement level, to take more responsibility for their own learning (Cooper et al., 2005). Likewise, students desire more academically rigorous activities that require them to invest more of their effort into their work (Cooper et al., 2005). AVID places historically academically underachieving students in rigorous, college preparatory classes that are often reserved for high achieving students and requires the learner to become more personally invested in their own learning journey (Hubbard & Mehan, 1999).

Closing the Achievement Gap

With the 2001 adoption of the No Child Left Behind Act, states were required by law to provide all learners access to superior academic experiences, but achievement gaps remained between affluent White students and minority students from lower income homes (Franklin, 2011; Kozol, 2005; Lavin-Loucks, 2006; Lee & Burkam, 2002; Rothstein, 2004; Williams, 2003). Even with all students having access to quality educational experiences, school districts were still left with the need to close these gaps using programs and other initiatives. Navarro and Natalicio (1999) studied an El Paso school district that had won the National Award for Professional Development from the U.S. Department of Education "despite [having] a student population that in other communities would have been thought of as too poor and too poorly versed in English to succeed" (p. 597). The school district in El Paso that was studied recognized that they must not rely on using specialized programs that benefited one or two students; rather, it implemented strategies that involved the community for educational improvement.

Lastly, the study showed improvement would need to occur throughout the school system for change to be continuous (Navarro & Natalicio, 1999).

When looking at ethnic minority representation at schools in relation to their accountability ratings, Black students are often overrepresented at the most impoverished schools within the nation (Griffin & Allen, 2006). It could be said that school systems, which once worked to end segregation among minorities, have been re-segregated based on socioeconomic class (Griffin & Allen, 2006). In addition to schools having a diverse demographic population that may be a limiting factor for success, these schools typically have decreased access to necessary resources (Griffin & Allen, 2006). These schools' demographic breakdown may not be reflective of their district; the district's demographic breakdown may be the exact opposite of the school with a high minority population (Trent et al., 2003).

Students who are at schools with a highly diverse student population often have less access to enrollment in rigorous academic courses, such as Advanced Placement courses, which offer college readiness (Furry & Hesch, 2001). According to Watt et al. (2008), AVID students were better prepared for college because of their participation in the AVID program and its rigorous curriculum. In a study conducted among 10 schools in five districts that were matched based on socioeconomic status and demographic data, AVID students were found to be better prepared for college than their peers (Watt et al., 2006). AVID schools demonstrated increased enrollment in advance placement courses, increased student graduation as part of the recommended or distinguished graduation plan, and increased high school graduation rates as a whole compared to those schools that did not have AVID programs (Watt et al., 2006).

Hubbard and Mehan (1999) presented that AVID has been successful in preparing underachieving students for college. These underachieving students were often identified as coming from a low-income home, from families of various ethnic backgrounds, and where English was a second language. After completing a three-year course of study, AVID students demonstrated significantly improved four-year college enrollment rates when compared to their peers (Hubbard & Mehan, 1999). Forty-three percent of Latino students who had been selected and completed the AVID program enrolled in a four-year college or university compared to a comparable school district's average of 25%, with the national average of students enrolling in a four-year college or university being 29% (Hubbard & Mehan, 1999). Likewise, 55% of African American students that completed the three-year course of study in AVID enrolled in a four-year college or university compared to the San Diego School District average of 35%, with the national average of students enrolled in a four-year college or university being 33% (Hubbard & Mehan, 1999).

National Assessment of Educational Progress (NAEP) samples of students' achievement scores in math and science from 1996 to 2000 and reading scores from 1998 to 2002 exemplified a growing disparity of Hispanic and African American students when compared to their White counterparts (North Central Regional Educational Laboratory, 2004). While scores increased among African American and Hispanic students, White students' scores increased as well. Increased scores across the three ethnicities widened the gap that was already present, and the achievement gap continued to widen over time as White students' scores increased at a higher rate compared to their

African American and Hispanic counterparts (North Central Regional Educational Laboratory, 2004).

In an evolving economy, a growing achievement gap proves to be an issue for students as they graduate and begin to pursue college enrollment and careers. Jobs once held solely for Americans have become internationally available (Franklin, 2011).

According to national trends, 60% of jobs require math and science skills that are only available to be learned at the college or university level (Franklin, 2011; National Center for Educational Statistics, 2006; Texas Legislative Budget Board, 2007). The economic growth of the United States depends on methods of closing the achievement gap (Franklin, 2011; National Governors Association, 2005). In order to be a competitor in the global market, all students need to obtain certain intellectual skills, personal resources, and the intrinsic motivation necessary to be competitive in the worldwide marketplace (Cooper et al., 2005; Franklin, 2011).

Students' ownership in learning contributes to their academic success, marketability for postsecondary education opportunities, and level of workplace performance. According to Cooper et al. (2005), self-regulation, a technique by which students are taught to use their own thoughts, feelings, and actions to obtain their goals, may be a way for students to actualize their personal desires for learning. Teaching self-regulation to students who are not naturally academically successful, but also are not falling behind, and entrenching them in challenging curriculum has shown to increase student performance in different contents (Belfore & Hornyak, 1998). Inherently, differentiated instruction should teach students to take responsibility for their own learning (Tomlinson, 2008).

The assignment of a campus's accountability rating depends on the measurement of academic attainment of the student group as a whole. One should not lose sight of how the disaggregation of different subpopulations of students' academic achievements affects the campus group's accountability scores, which are how school ratings are assigned. These analyses of subpopulations' academic achievement data show where the gaps in educational achievement are present. Most schools have provided a solid education for middle class, White students, but they lacked the services to provide for students of color, especially those who fall into the classification of low socioeconomic status (Campbell, Hombo, & Masseo, 2000).

Students of color are often overrepresented in programs such as special education or lower level academic classes (Campbell et al., 2000). Educational leaders often fall into equity traps that lead to assumptions that students of color cannot be successful learners (Mackenzie & Scheurich, 2004). Consequently, these students are often not offered preferred placement in advanced level classes (Olson, 1991; Reglins, 1992; Robertson, Kushner, Starks, & Drescher, 1994; Useem, 1990), have a lower high school completion rate (Cardenas, Montecal, Supik, & Harris, 1992), are educated with less experienced teachers, and have less access to resources (Keleher, 2000; Mackenzie, 2001). These unsupported beliefs hinder schools and students from making progress. Through discussion, these beliefs begin to predicate themselves among peers and lead to ingrained truths on a campus or within an educational cohort that students of color cannot perform as high or outperform their White peers (Mackenzie & Scheurich, 2004).

Educators model their beliefs for students, and the students begin to view themselves the same way. The consequences may lead to a less rigorous curriculum,

lower academic standards, increased disciplinary issues, decreased high school completion rates, and eventually a greater increase in the achievement gap (Mackenzie & Scheurich, 2004). By identifying, understanding, and using the perceived reasons why students of color may not be successful learners, educational leaders have the possibility of developing schools that experience academic success for students of color (Mackenzie & Scheurich, 2004).

Many tactics are used in an effort to close the achievement gap. One of these is to try to be "colorblind" (Mackenzie & Scheurich, 2004). However, meeting the needs of the individual learner promotes student success. Teacher accountability for what their students are learning has increased. Tactics, such as embedding strategies and practices into rigorous curriculum, have a direct effect on students becoming successful in mastering higher levels of curriculum. The same higher-level curriculum that the students mastered could be in a course that they may not have been enrolled in because of an academic perception (Mackenzie & Scheurich, 2004). Identifying these variances in course enrollment patterns across different ethnic groups of students provides some insight into the dissimilarity of access and subsequent decreased participation in rigorous courses, which proves to be an area of concern across academic reform practices, specifically closing the achievement gap (National Center for Educational Statistics, 2000; Whitaker, 2005).

Advancement Via Individual Determination

AVID was developed over 30 years ago as a program to foster a self-motivated lifelong learning process for students. It is a program steeped in the belief that as students attain a greater responsibility for their learning, an increase in self-sufficient

knowledge occurs (AVID Center, n.d.-a.). Mary Catherine Swanson, developer, began her teaching career as a remedial English teacher in the mid-1960s and saw a time in education when students were tracked into courses based on their perceived academic ability (AVID Center, n.d.-a). In the late 1970s, she saw her school undergo a mandated integration process which moved students from a less affluent high school, with a high ethnic minority population, into the primarily Caucasian, affluent school she had taught at for years (AVID Center, n.d.-a). Ms. Swanson saw a need for high academic expectations to be placed on these new students with supports and practices that would help them actualize success.

Ms. Swanson saw that federally ordered desegregation of schools would lead to students on her campus that would suffer academically (AVID Center, n.d.-a). Ms. Swanson knew that something had to be done for students who were coming from traditionally underperforming schools and were now going to be placed in a school that had received many academic accolades. She sought to enroll these students in an academic elective, which would take place during their academic school day and would provide supports necessary to make them academically successful (AVID Center, n.d.-a).

AVID began on the premise that students who had not been exposed to academically rigorous courses could be successful when provided with additional educational support. Starting as a study skills course in Ms. Swanson's classroom, students learned crucial educational practices that would help them perform well in courses that were more academically challenging than those that they were accustomed to (Arellanas, Bishop, & Castruita, 2005; AVID Center, n.d.-a; Swanson, 2002). At AVID's inception in 1980, 32 students were part of the program (AVID Center, n.d-b).

AVID has grown to encompass over 425,000 students (AVID Center, n.d-b). These students attend AVID classes at over 4,800 campuses that offer the AVID program (AVID Center, n.d-b). AVID started as a high school achievement program, but it now begins teaching students AVID practices at elementary sites and offers the opportunity for students to continue AVID into post-secondary institutions (AVID Center, 2015b). AVID can be accessed in 48 states and 16 different countries/territories (AVID Center, n.d-b). AVID has transitioned from an elective class to an encompassing academic intervention program where its effects can be witnessed school-wide.

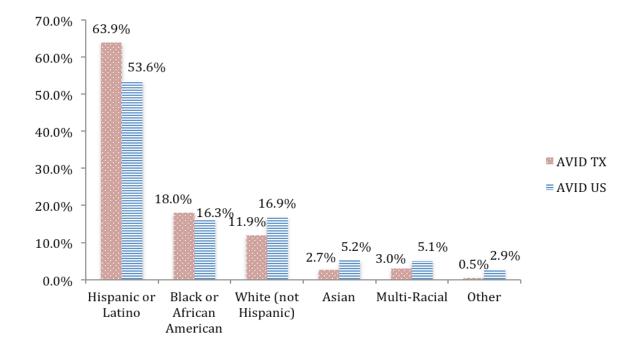
The National AVID Center compiles site and state data yearly. The data allow for the National AVID Center to report enrollment, demographic information, and growth trends of the AVID program. For the cohort years 2007-2011, 1,468 Texas AVID students maintained four-year enrollment in the AVID program (AVID Center, 2015c). These students started as freshmen in 2007 and finished high school as seniors at graduation in 2011. Nationally, there were 10,225 AVID students who maintained four-year enrollment in the AVID program (AVID Center, 2015c).

As described by the AVID Senior Data Collection for 2007-20011, 63.9% of AVID students in the Texas cohort were of Hispanic or Latino origin, 18.0% were of Black or African American origin, 11.9% were of White (not Hispanic) origin, 2.7% were of Asian origin, 3.0% were of Multi-Racial Origin, and 0.5% were of an Other origin not described (AVID Center, 2015c). Nationally, 53.6% of the 2007-2011 AVID cohort was of Hispanic or Latino origin, 16.3% were of Black or African American origin, 16.9% were of White (not Hispanic) origin, 5.2% were of Asian origin, 5.1% were of Multi-Racial origin, and 2.9% were of an Other origin not described (AVID Center,

2015a). Figure 2.1 depicts the demographic breakdown of AVID students in the state of Texas and nationally that maintained four-year enrollment in the AVID Program from 2007-2011.

Figure 2.1

National and State AVID Program Demographics 2007-2011 Cohort



Source: AVID Center, 2015c

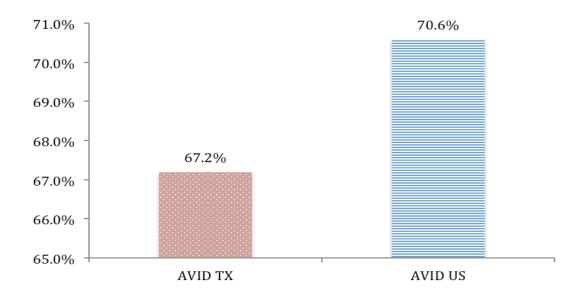
The Senior Data collected by the National AVID Center also denotes students who are economically disadvantaged. According to the reported data from the Senior Data Collection for the 2007-2011 cohort, 67.2% of Texas AVID students who maintained four-year enrollment in AVID from 2007-2011 were economically disadvantaged. Nationally, 70.6% of students who maintained four-year enrollment in AVID from 2007-2011 were economically disadvantaged. This accounts for students who self-reported their economic status within the Senior Data Collection database.

Figure 2.2 depicts the percentage of AVID students in Texas and the nation who selfreported an economically disadvantaged status.

Figure 2.2

AVID Texas and United States Economically Disadvantaged Percentage: 2007-2011

Cohort



Source: AVID Center, 2015c

The belief of the AVID program is that the AVID class can provide structures to promote student success across academically challenging courses. This is in line with the mission statement to "close the achievement gap by preparing all students for college readiness and success in a global society" (AVID, 2015a, para. 1). The actualization of one elective class leading to institutionalized change has been seen as difficult to achieve. The focus of the AVID course morphed from an elective class to a program that provided educational supports from administration and counselors with committed financial resources that would allow for the hiring of tutors, professional development of stakeholders, and the continuous monitoring of quantitative and qualitative data. The

academic supports put into place by the AVID program provide for exposure and successes in rigorous coursework, with a variety of stakeholders playing an integral role in students achieving that success (AVID Center, 2013c).

AVID strives to improve academic achievement, thus increasing enrollment of minority, low-income students in four-year colleges and universities. Increased rigor that a student experienced throughout the school day, combined with access to academically challenging courses, were underpinnings of the program (Black et al., 2008; Martinez & Klopott, 2005; Mehan, Villanueva, Hubbard, & Lintz, 1996). Due to the increased academic demands and the growing need for students to be served, AVID had to become more than an elective course. It functions as a whole-school reform program with effects that are experienced school-wide.

The AVID program offered academically disadvantaged students targeted interventions aimed at increasing college success. Through a specific curriculum where academic strategies were taught, ongoing educational supports were provided and exposure to college level curriculum happened, AVID students were entrenched in a more rigorous, self-reliant academic environment. AVID is more than an intervention program; it is an educational philosophy held by the sites that implemented AVID. Students at these sites were held academically accountable to the highest standard. Academic and social supports were constantly provided, and the expectation is held that the AVID students rise to the challenges presented (AVID Center, 2013b).

AVID welcomed data to analyze the success of the program (AVID Center, n.d.-a). Success of the program was measured by 11 Essentials that are hallmarks of the program (AVID Center, n.d-b). These 11 Essentials calibrate student academic

achievements, access to rigorous curriculums, assessment of the AVID classroom, availability of social supports, ongoing staff development, and site staff involvement to determine if the campus is meeting AVID standards.

The primary component of the AVID program is the delivery of AVID practices. Students are provided access to a college preparatory curriculum, in-class tutoring, social support systems, and learning opportunities built around the Socratic method of inquirybased learning (AVID Center, n.d.-a). The AVID classroom curriculum was built around teaching students writing, inquiry, collaboration, organization, and reading in order to make AVID students better learners (Franklin, 2011; Marzano & Pickering, 2005; Mehan et al., 1996; Rothestein, 2004; Stanton-Salazar, 2001; Watt, Powell, Mendiola, & Cossio, 2006). Students relied on each other and started collaboratively learning (Treisman, 1993). Students were taught how to take notes following the Cornell note taking system, how to use their notes to study, how to take notes as they read texts, and how to ask questions about their notes as they progressed through the learning process (Nieto, 2000; Paulk, 2001). The AVID teacher served as a student advocate with enlisted assistance of counseling staff, school administration, and the AVID site team (AVID Center, n.d.-a). Students were required to sign contracts once accepted, which outlined their commitment to the program (AVID Center, n.d.-a).

AVID has been used as an educational program that promotes school reform.

AVID is a program that is designed to help the middle learner. In addition to the benefits to the middle learner, the assumption is that the entire site will improve academically as teachers and students adopt the AVID essentials throughout the campus. Once a site's AVID program is fully integrated across the campus, an application can be made to the

national AVID program to be selected as a National Demonstration School, the most prestigious of honors through AVID (Franklin, 2011).

Campus-wide support is a factor that the AVID Center assesses each year for certification. As part of this process, each AVID school must have a site team that works for improvement of the program and increased acceptance among the campus. The site team consisted of the AVID elective teachers, the AVID coordinator, selected administrators and counselors, and campus content-based teachers (Franklin, 2011). The site team met regularly to assess the progress of the AVID program. The team also assisted in the yearly evaluation of the site's implementation of AVID's 11 Essentials for annual certification.

AVID Curriculum

The AVID curriculum is based on four methodologies for student learning and success. AVID promotes the WICOR model (Figure 2.3) to be taught in the AVID elective class, as well as carried throughout the campus for student enrichment. In WICOR, the students are taught (W) writing to learn; (I) inquiry to encourage critical thinking; (C) collaboration among peers, tutors, and teachers; (O) organization to sustain in post-secondary education; and (R) reading to learn (AVID Center, WICOR, 2013). Each area of WICOR encourages students to build social and cognitive skills that will promote them beyond the classroom. The goal of WICOR is to develop students who will benefit from these fundamental principles beyond post-secondary education (AVID Center, 2013).

Figure 2.3 *WICOR*



Source: Columbia Public Schools

The AVID classroom is designed to be the central hub of the AVID students' academic curriculum. Two days during the week are devoted to structured tutorials in which AVID students bring questions relating to math, science, English, or social science. The remaining three days are based on skill building in areas of WICOR-writing, inquiry, collaboration, organizing, and reading. Students are taught how to study, how to take notes, how to ask questions, and how to process questions and answers at higher order thinking levels.

AVID students are not only provided with a curriculum that supports college readiness and success, but the program delves into specific, targeted areas to support the transition to college such as tutoring, academic environment, and developing social support systems, all of which are imbedded in inquiry-based learning (AVID Center, 2013c). These supports are created by developing self-sustaining learners through daily teachings of tools like Cornell note taking (Nieto, 2000), organization methods, time management tactics, and critical thinking combined with processing skills.

AVID students gain skills in embedded learning practices and a peer support system that becomes part of a "hidden curriculum." A "hidden curriculum" refers to those societal norms, values, and beliefs reflective of middle class values that are embedded into the educational process through social interactions (Franklin, 2011; Horn, 2003; Payne, 2008). The term can be attributed to Phillip Jackson dating back to 1968 (Franklin, 2011). AVID students are taught the learning culture and social cues of a successful, self-motivated learner; they are the habits that were based on the middle class learners' values, practices, and educational norms (Apple, 1982; Apple & Weiss, 1983; Cazden & Mehan, 1988; Dreeben, 1968; Franklin, 2011; Keddie, 1971; Payne, 2008). By teaching students these cultural norms for learning, academic success can be attributed to rectifying the lack of knowledge surrounding cultural learning practices that AVID students had in comparison to the dominant class's cultural learning capital (Franklin, 2011).

AVID students learn how to learn. During this process, they become accustomed to the social cues and educational habits of the group (Franklin, 2011; Payne, 2008). AVID students become accustomed to a different cultural capital through the actions of educators, peer-to-peer interactions, and adaptation to school policies and curriculum (McCutcheon, 1998; Turner, 1983).

According to Dewey (1916), education is a socially interactive process where students are taught how to live and be productive in society, along with content knowledge. Dewey (1916) believed that the knowledge a student came to school with greatly affected how the student would learn and attain new knowledge. Without the social interaction of a hidden curriculum, students who are presented with new content

and skills that are not in line with previous acquired knowledge are unable to utilize the newly acquired skill set freely (Brooks & Brooks, 1999; Franklin, 2011).

The AVID class combines teaching these strategies with direct instruction of writing, inquiry, collaboration, and development and proper utilization of academic vocabulary (Marzano & Pickering, 2005; Mehan et al., 1996; Rothstein, 2004; Stanton-Salazar, 2001; Watt, Powell, Mendiola, & Cossio, 2006). Based on state assessment tests, end-of-course tests, and college enrollment, AVID students academically outperformed their non-AVID peers (Watt et al., 2003).

Much of the literature presented relating to AVID is not located in refereed journals. Many of the studies are presented by the National AVID Center, thus creating the potential for bias. The literature, however, does add important information regarding the topic (Whitaker, 2005).

The AVID Process

AVID student selection begins with a recruitment process for acceptance into the program. Students are identified for potential selection by a data-driven process that relies on a student's prior grade point average, state standardized test scores, and additional data that the school district may deem necessary (AVID Center, 2013d). In addition to the set selection criteria, recruitment meetings are held, and various stakeholders (e.g., school administrators and counselors) are involved in the selection process (AVID Center, 2013d).

As data are collected during the recruitment process, additional information such as ethnicity, socioeconomic status, student attendance, and discipline is noted for each student. Teachers on the campus, who are considered site team members from various

curricula areas, are involved in the selection process (AVID Center, 2013d). As part of the certification requirements, strict records are retained on the selection process.

Once students have been identified as having the greatest AVID potential, they are invited to apply for acceptance. Once all selections are finalized for a campus AVID program, the group of students selected is compared to the entire student body of the campus to ensure that the selected AVID group represents the campus group for that year, as required by AVID implementation guidelines (AVID Center, 2013b).

According to Vygotsky (1978), the road to higher order thinking and learning is developed and maintained by social interaction and language where students have the opportunity to share experiences. AVID offers students a unique approach to many practices and methodologies of the program's instructional processes since it is a model where students take ownership of their own learning through the curriculum. One example includes tutoring, which takes place in the AVID classroom and is scheduled as part of the instructional day. These sessions are facilitated by a tutor, who is most often a college student trained in AVID tutor methodologies. The AVID students lead the tutoring session while the tutor continues to prompt inquiry, encourages critical thinking, and guides students to discover the correct answer for themselves (Furgeson, 2006; Lockwood & Secada, 1999; Sundly, 2006).

Tutoring sessions were developed in this fashion to not only empower students to discover the answers to their questions, but they also create an opportunity to develop academic vocabulary, instill thought processes, and encourage sustained success after high school in post-secondary institutions (AVID, 2012a). This method is closely aligned with Bruner's Discovery Learning Theory in which teams of learners used inquiry to

answer questions that other team members had while they participated in impassioned, and sometimes controversial, disagreements and assumptions in a non-threatening, invigorating manner (Bruner, 1960).

AVID, as an entity, believes in promoting the students' belief in themselves to succeed, even though the entity of the school system said that they should not experience success. A 2008 case study was conducted on eight high schools in California and Texas (*N*=180). The personal bonds and family atmosphere that were established and promoted between AVID students and tutors were shown to increase the self-efficacy of the students (Franklin, 2011; Watt et al., 2008). The collaboration and activity that occurred among the tutors during tutoring sessions were designed to engage students in the thinking process. This level of involvement was similar to the inquiry-based learning model or the Socratic method. An example of an inquiry-based learning model is where students become engaged in evidence-based explanations for their beliefs, arguments, and ideas (Hmelo-Silver, Duncan, & Chinn, 2007). In both the AVID instructional process and in the inquiry-based learning model, the teacher holds the role of facilitator in student learning (Franklin, 2011).

AVID takes the inquiry model one step further by teaching students how to ask questions that elicit a response that will lead to additional questions. AVID students are trained to ask additional probing questions and to encourage hearty discussions in an effort to increase mastery of the subject matter, especially for students with disadvantages, by offering a more in-depth understanding of the information presented (Hmelo-Silver et al., 2007; Lynch et al., 2006).

In addition to *Inquiry*, the other four components of the WICOR model assist students in tackling rigorous academic courses. AVID utilizes these as the "foundation for AVID student instruction, curriculum and professional development" (AVID Center, 2013, Secondary Overview). Collaborative learning in the AVID classroom (Triesman, 1993), students being required to keep an AVID binder, learning logs, taking Cornell notes, and learning how to acquire knowledge all contribute to AVID's success (Nieto, 2000; Paulk, 2001). Daily lessons and practices are entrenched with methods to learn knowledge acquisition skills and allow students to understand and see the "hidden curriculum" (Franklin, 2011). These lessons are coupled with instruction in organization strategies, critical thinking skills, communication skills through writing, and time management. Together, these practices comprise the daily components of the AVID classroom (Mehan et al., 1996; Mendiola & Cassio, 2006; Robinson, 2004; Stanton-Salazar, 2001; Watt, Powell, Marzano, & Pickering, 2005).

Mandated by AVID, schools must have a site team consisting of teachers of interdisciplinary curricula, AVID teachers, administrators, and counselors (AVID Center, 2013; Franklin, 2011). The site team plays an integral role in the recruitment and enrollment of students into the AVID program (AVID Center, n.d-b). The team works to complete the certification self-study for AVID certification and brings a global view to implementing AVID academic methodologies across varied academic courses (AVID Center, n.d-b). The site team's charge in the AVID process is to lead and guide implementation of the AVID program at the designated site (AVID Center, 2013a).

AVID Data Collection

Data has been a cornerstone to AVID's understanding of student success. As AVID grew exponentially, so did the need for a method of monitoring (AVID Center, n.d-b). To ensure fidelity in implementation, the National AVID Center developed the Essential 11 and began to formally monitor implementation in 2005 (AVID Center, n.d-b). To provide evidence of implementation, AVID sites conduct an annual self-study on the level of implementation for the Essential 11.

Data collection has been essential to the AVID program since its inception in 1980 (AVID Center, n.d.-a). At the beginning, Ms. Swanson was the only AVID teacher. As her students' achievements became apparent, the San Diego school system began to take notice. Not long after her initial AVID class, she was asked to begin sharing her AVID program with schools beyond San Diego. It was at this time that Ms. Swanson knew there had to be a system in place to ensure the fidelity of implementation and a continual monitoring process (AVID Center, n.d-b). From this, the AVID Guiding Principles were born, which eventually led to the exploration and development of the Essential 11.

Throughout the 30 years since the AVID program's inception, there have been multiple checks to ensure the fidelity of implementation and to ensure that all aspects of the AVID program's successes are addressed in the Essential 11. In 2002, research was conducted to ensure the necessity of the Essential 11 to the program's success. Entitled "The Magnificent Eight: AVID Best Practices Study," the eight evaluated sites indicated that the Essential 11 were crucial in ensuring the success of the program (AVID Center, n.d-b).

The collection of data has evolved since the inception of the program. The AVID program's goal is to improve a student's academic career and performance through the Essential 11 that are implemented in the AVID classroom and throughout the school. Each AVID site must be scored annually on every essential in order to maintain their certification through the national AVID program. Certification scores are assigned from zero to three. A score of zero indicates the site is not meeting the AVID standard; a score of one means the site is meeting certification standards; two shows routine use of AVID practices, and three indicates full implementation of AVID, where the educational practices and methodologies of AVID can be observed throughout the school (AVID Center, n.d-b).

The Essential 11, when evaluated and deemed at a high level of execution in each area, have demonstrated correlation to increases in Advanced Placement course enrollments, college entrance exam completion, and acceptance into four-year colleges and universities (AVID Center, n.d-b). As listed below, the Essential 11 center around AVID's founding principles and practices of the program, which are proven to have maximum effects on student success:

- (1) Selection of students that focuses on students in the "academic middle," but have data-proven academic potential;
- (2) AVID participants (student and staff) choose to participate in program;
- (3) School site committed to complete implementation of the program, ensuring the year-long elective course is offered within the regular school day;
- (4) AVID students enrolled in a rigorous course of study that meets university enrollment standards;

- (5) Implementing and monitoring a strong, relevant writing and reading curriculum as a basis for instruction;
- (6) The practice of inquiry was used in the AVID classroom to ingrain critical thinking in learning;
- (7) Collaboration built the groundwork for instruction within the AVID class;
- (8) Tutors trained in AVID methodologies from colleges and universities were available at a sufficient rate for the AVID class;
- (9) AVID program implementation as well as student progress was monitored through the AVID Center Data System, with results analyzed for ensured success;
- (10) The site or district guaranteed participation in certification and involvement in AVID staff development, as well as dedicated financial resources were provided to financially support the program;
- (11) An active, voluntary interdisciplinary site team collaborated on issues concerning access and availability to college preparatory courses and success in those courses (AVID Center, 2013b, pp. 5-6).

Through proper implementation of the AVID program, whole school reform can be achieved. According to AVID, approximately 92% of students completing the AVID course completed the requirements necessary for admission into a four-year college or university (AVID Center, 2013a). This compared to 36% of students nationally who completed requirements for admission to a four-year college or university (AVID Center, 2013b).

Implementation of the AVID program essentials with fidelity to the AVID standard is a keystone to the program's success. Each district must annually assess their level of implementation of these essentials. The measure of success for implementation of the AVID program is based on the Essential 11, as well as the Certification Self-Study (CSS) that each AVID site must complete each year. These two tools were developed to create continuity of implementation and as a method for AVID sites to ensure fidelity of implementation (AVID Center, n.d-b). The CSS is a method for secondary AVID institutions to measure implementation levels of the Essentials 11 of the AVID program (AVID Center, n.d-b). The belief of the AVID program is that higher implementation levels result in higher student achievement (AVID Center, n.d-b).

According to Elliot and Mihalic (2004) and Dane and Schneider (1998), the fidelity of implementation has a direct correlation on the expected outcome of the intervention program. The Certification Self-Study is conducted by the campus site team as a review of each indicator within the study. The indicators follow the direction of the Essential 11, and a continuum was developed to measure whether a site was Level 0: Not AVID; Level 1: Meets Standards; Level 2: Implements routine use of AVID practices and procedures; or Level 3: Institutionalized or evidence of use of AVID practices and procedures across the site (AVID Center, n.d-b). Once the CSS is complete, the site coordinator uploads the data into the AVID database to determine if a site is Non-Certified/Affiliate, Certified, or at the Demonstration level, the highest level of recognition of AVID practices.

AVID provides training in the 11 program essentials and workings for district and campus level coordinators, guidance counselors, administrators, AVID teachers, site team

members, and curriculum-specific educators. These trainings come at an additional cost to the site licensing and are offered throughout the year in centralized locations as either a four-day Summer Institute or two-day Path training. These trainings offer the building points for AVID at the district and campus levels (AVID Center, n.d-b).

AVID not only prepares students for postsecondary enrollment, but it also increases their achievement while in high school. As an implemented model for comprehensive school reform, AVID has transformed many schools in many states (AVID Center, 2013c). AVID students in the state of Texas, who were studied longitudinally, showed that after completing at least three years of the AVID course of study, graduated with a Distinguished or Recommended diploma 98% of the time (AVID Center, 2013c). This number compares to the students who were not in AVID graduating with a Distinguished or Recommended diploma 81% of the time (AVID Center, 2013c). In addition, AVID students were 8% more likely to enroll in a four-year college or university immediately following graduation, and 8% were more likely to continue that enrollment the following year (AVID Center, 2013c).

In 2000, 92% and in 2001, 93% of AVID students completed either a Recommended or Distinguished graduation plan as opposed to the Minimum (Franklin, 2011). Ninety-three percent of AVID students enrolled in a four-year university, and 20% were more likely to enroll in a four-year university than their peers.

AVID was studied longitudinally in the seven school districts across Texas in 1999, 2000, and 2001 (Watt, 2003). The study assessed student achievement, course enrollment, and attendance of both AVID students and their non-AVID peers (Franklin, 2011). The study demonstrated that AVID students outperformed their non-AVID peers.

AVID students were shown to have greater access to rigorous curriculum through opportunities to enroll, scored higher on the state standardized test (Texas Assessment of Academic Skills or TAAS) in 2001, and were on track for postsecondary enrollment. In 2003, AVID students were projected to do well on the new state assessment (Texas Assessment of Knowledge and Skills or TAKS) based on grade point averages (Fashola & Slavin, 1998; Franklin, 2011; James & Partee, 2003; Lipovski, 2004; Martinez & Klopott, 2005; Mehan, et al., 1996; Stanton-Salazar, 2001; Watt et al., 2006; Watt, Huerta, & Lozano, 2007; Watt, Yanez, & Cossio, 2003; Weiher et al., 2006).

Because one of AVID's founding principles is preparation for postsecondary enrollment, acceptance to an institute of higher education was evaluated. According to the AVID Center (2013), 71% of AVID high school seniors are accepted to four-year colleges. Fifty-five percent of African American AVID seniors and 43% of Latino AVID seniors were accepted to a four-year college compared to 33% and 29% respectively across the nation (AVID Center, 2013c).

Motivational activities and college explorations are scheduled on a weekly basis during the AVID class. Guest speakers are also brought in to expose students and provide opportunity for exploration of postsecondary educational endeavors such as different bachelor's degree programs at various universities, master's studies, and even doctoral programs. These presenters also offer insight into requirements for entering career fields and teach personal success skills such as goal setting and paths to attainment. As students progress through the AVID program, college visits to universities are scheduled as part of the AVID curriculum to develop awareness of collegiate offerings and opportunities (Guthrie & Guthrie, 2000).

When studied in 1997, AVID students enrolled in four-year colleges and universities three times more than the California state average (Cunningham, 2003; Franklin, 2011). When assessing retention rates, 80% of the AVID students remained continuously enrolled (Franklin, 2011; Watt et al., 2003). AVID eliminated barriers of college admission previously created by family income and provided support structures that enabled AVID students to supersede the barriers with their academic success (Mehan et al., 1996).

AVID Holistic Approach

The most educationally at-risk students nationally are those students who have experienced poverty over an extended period of time (Gandara & Maxwell-Jolly, 1999). This extended period of poverty can also be coupled with a lack of aspirations to attend college (Whitaker, 2005). Many times, families who have experienced prolonged poverty experience more health ailments, may move frequently, and often their schoolaged children attend schools in areas with higher poverty rates (Gandara & Maxwell-Jolly, 1999; Whitaker, 2005). These factors may contribute to significant gaps in students' education and academic achievement (Gandara & Maxwell-Jolly, 1999).

Parents who are economically disadvantaged often lack the knowledge to prepare their children for postsecondary education. AVID, as an early intervention program, may help increase parents' ability to encourage their children to plan and prepare for admission and continuance in a four-year college or university (Perna, 2000). AVID, as a college preparatory program, assists parents who are unfamiliar with the practices and procedures of postsecondary enrollment with access to seminars, college counselors, and ongoing exposure to methods of how to support a student who has postsecondary

aspirations. The AVID program offers educational opportunities for AVID families to learn about the financial assistance available for college students, the advantages of postsecondary education, as well as expectations of college students (Whitaker, 2005).

The AVID program requires that the parent be involved in their child's educational partnership. AVID parents sign a contract that pledges their support for their student academically. In addition, parents are given the opportunity to participate in site team meetings of the AVID program and remain in contact with the AVID elective teacher. Family workshops are held to garner parents' support of the students' academically rigorous coursework and long-range goals. Parents are also taught about AVID strategies and methodologies, college readiness steps, as well as scholarship and financial aid application processes (AVID, 2013c).

College Readiness

AVID was initially developed as a program to teach study skills to inner city students of minority origin that were court ordered to attend an affluent high school in California. AVID evolved into a program that developed college readiness in students through a daily elective course in their academic schedule (Franklin, 2011). AVID's commitment to college readiness is evidenced in the AVID class where students receive assistance and continued instruction on college entrance exam requirements, specialized assistance, and dedicated class time for applying to colleges and universities while navigating and completing financial aid forms, bi-weekly access to college-trained tutors for targeted support in specific subject areas, and continuous instruction in a curriculum focused on making students college ready (Guthrie & David, 1994).

According to AVID, 88% of graduating seniors applied to a four-year college or university; 78% of those students who applied were accepted (AVID, 2015a). From the class of 2011, 91% of AVID graduates nationally planned to attend a postsecondary institution (AVID Center, 2012b). Fifty-eight percent of the 91% who planned to attend a postsecondary institute planned to attend a four-year university (AVID Center, 2012b). At its inception, AVID's original intent was to bolster students' confidence and abilities to meet the academic needs of a four-year university. By 2012, AVID became a program that "served over 425,000 students in more than 4,800 elementary and secondary schools in 48 states, the District of Columbia and across 16 countries/territories" (AVID Center, 2012b, figure 1). Since 2012, AVID has experienced growth to include 4,837 schools, which services students in all 50 states, the District of Columbia, and internationally (AVID Center, 2015b). Ninety-seven of the 4,837 campuses are either international or Department of Defense Educational Activity schools (AVID Center, 2015b). AVID has seen the inception and adoption of AVID for Higher Education, with 41 institutes of higher education currently offering the AVID program (AVID Center, 2015b).

AVID was developed on the philosophy of placing high expectations on students, while providing academic and social supports. Special detail is paid to each aspect of the AVID program to personalize the educational experience for the student. In turn, school personnel, AVID students, and AVID parents can expect that the AVID students will rise to the academic challenge that they have been entrenched in (AVID Center, n.d-b). The guiding principles of AVID were built on strong academic skills and methods that expose students to challenging curriculum and are combined with the expectation of enrolling in a four-year college or university at the completion of the program (AVID Center, 2013c).

Attendance

In order for a state to meet their AYP rating, schools must maintain a certain percentage of attendance among their student population on a daily basis. This, coupled with the state's compulsory attendance laws for students ages six to eighteen years old, legally require parents to ensure that their child is in attendance at school, or the parent faces potential legal prosecution (TEC, 2010, Section 25.085). These are legal tools that schools have to assist in ensuring that students are in attendance daily.

Chronic absenteeism has been shown to be a precursor for students dropping out of high school prior to receiving a high school diploma (National Center for Educational Statistics, 2004; TEA, 2009). Supports are created and provided for students to succeed through the AVID elective class and the cohort model of the program (Franklin, 2011; Pitch et al., 2006). AVID students, when compared to their classmates, were found to have greater attendance rates because of the accountability created through a collaborative learning environment (Watt et al., 2006).

Students with high absentee rates or increases in tardiness (greater than 10 times per month) were shown to be six times more likely to become dropouts (National Center for Educational Statistics, 2004; Whitaker, 2005). Because dropout rates can be a complex issue, many models have included a prevention and recovery method for curbing poor attendance (Pinkus, 2008; Whitaker, 2005). Student engagement was reported to be a potential issue leading to increased absenteeism (Whitaker, 2005).

The AVID coordinator, counselor, teacher, tutors, and students work as a team to ensure the academic success of those around them. Accountability to the AVID program and fidelity to the standards rely on the entire AVID team, including students, being

dedicated to full implementation of practices and procedures. Holding students accountable for an increase in their absences has been accomplished through personal connections in the AVID program (McPartland et al., 1998; Reyes, Scribner, & Scribner, 1999). Improved attendance of those students who had an increased number of absences was crucial because decreased attendance could lead to eventual decreases in high school completion rates (McPartland et al., 1998; Reyes, Scribner, & Scribner, 1999).

Annual collection of attendance rates at the state level allows for the AVID program to see how AVID students performed in comparison to overall attendance rate for enrollment. During 2008-2009, AVID students maintained a 95.1% attendance rate (AVID, 2015d). The annual overall attendance rate for schools that offered AVID was 93.9% during 2008-2009. During 2009-2010, AVID student attendance remained the same as the previous year, but the overall attendance rate for schools that offered AVID declined slightly from the previous year to 93.5%. During the 2010-2011 school year, AVID students from the state of Texas had a 95.4% attendance rate, while the overall attendance rate for schools that offered AVID improved to 94.0%. The AVID student attendance was consistently higher than the overall attendance of schools that offered AVID for the 2008-2011 school years (AVID Center, 2015d).

In a study conducted of AVID students in Texas, Watt, Powell, and Mendiola (2004) collected attendance data on 1,291 AVID students. From these data, the majority of AVID students were identified as 51% Hispanic, 25% African American, and 59% of the 1,291 students were female. The AVID students were found to be in attendance at school nearly 5% more than their non-AVID counterparts (Watt et al., 2004).

The social scaffolding that occurred in AVID increased a student's attachment to school by design, and thus increased school attendance (Pitch et al., 2006). The cohort model created by AVID, requiring AVID students to meet once a day in an elective class during the regular instructional day, lends itself to the social support structure. The emotional attachments that students develop with each other and the AVID teacher during the year(s) were believed to be a reason that AVID students attended school on a regular basis (Whitaker, 2005). The personal attention of the AVID teacher, when absenteeism occurred, positively impacted student attendance (McPartland et al., 1998; Reyes, Scribner, & Scribner, 1999; Whitaker, 2005).

Discipline

Students who have academic difficulties often battle with large numbers of disciplinary referrals. The feelings of self-doubt and frustration that accompany failure permeate a student's approach to their school day. The AVID program endeavors to provide supports in the more challenging academic setting that students find themselves in after accepting entrance into the program, while teaching students how to be successful academicians.

The AVID program strives to create a smaller learning environment for the AVID students enrolled in the program. Similar to how many smaller learning communities are created, AVID is a subsection of students that matches the general population of the campus. Through a smaller learning environment, students become more accountable for their actions, and teachers become more aware of each student's needs (McAndrews & Anderson, 2002). Improved relationships between teachers and students lead to increases in students' self-perceptions (Cox, 2008).

A smaller learning environment encourages students and their peers to develop a closer relationship with each other and their teachers. The academic bond between the teacher and the student is made stronger by more access and personal attention being available through the smaller educational setting (Cox, 2008). In addition, research has shown that students who have more one-on-one interactions with their peers, teachers, and school administrators through increased personal academic relationships have better attendance, fewer discipline problems, and increased academic achievement (Cox, 2008; Kacan & Schipp, 2000).

Student engagement is increased in a smaller school setting. These settings allow for students to be taught social norms for academic success. Smaller learning communities allow students to have greater access to teachers, administration, and counseling staff, along with greater ability to build friendships and academic accountability groups, which lead students to have an increased sense of belonging. This attachment to school has a direct relationship to improvement in graduation rates, attendance, and a decrease in disciplinary referrals (Cox, 2008; Dessof, 2004; McAndrews & Anderson, 2002).

In a study conducted by Cox (2008), AVID students were shown to have statistically fewer disciplinary referrals when compared to their non-AVID peers. When disciplinary referrals were assessed of AVID students in comparison to Pre-AP/AP students, AVID students that were studied longitudinally were shown to have half as many disciplinary referrals as the Pre-AP/AP group of students. Cox (2008) found that non-AVID students, over a three-year period, had twice as many disciplinary referrals as

Pre-AP/AP students who had nearly twice as many referrals as the comparative AVID group.

Many studies have looked at the success of the AVID program in relation to student academic achievement and college preparation; however, very few studies assess AVID participation and the number of disciplinary referrals that a student acquires.

Sense of Belonging

A sense of belonging in high school often provides confidence in students that helps push them through their high school academic career and prepare them for their postsecondary lives (National Association of Secondary School Principals, 2005). When studied, schools with a high poverty rate are linked to having a high record of failures and dropouts, thus providing little to prove different that they are more than "drop-out factories" (Balfanz & Legters, 2006). However, by providing students with extra assistance and academic supports through personalization of their educational experience, reform can be made (Balfanz & Legters, 2006). A lack of a personalized school environment and limited support structures contribute to repeated failures among students and eventual increases in drop out rates (Bridgeland, Dilulio, & Morrison, 2006; Keedy & Drmacich, 1991; Rorie, 2007; Smink & Reimer, 2005).

According to the National Association of Secondary School Principals, personalization heads the list of themes critical to transforming high schools (National Association of Secondary School Principals, 2006). Student engagement in their surroundings, through interests and learning styles, is crucial (National Association of Secondary School Principals, 2006). The NASSP went as far as saying that the organization of high school should change so that every student experienced an adult

advocate giving them personal attention in developing an individualized educational plan and having a person to rely on when a problem arises (National Association of Secondary School Principals, 2006).

Schools with low socioeconomic factors face many challenges. Providing extensive support and structures to students in these schools can allow students to overcome these challenges (Cooper et al., 2005). Interviews with staff at high performing, low socioeconomic schools had an overriding theme that suggested the positive relationships between all members of their school contributed to their academic success (Cooper et al., 2005; Rorie, 2007). Furthermore, the respondents stated that relationships among staff and students lead to higher test scores (Cooper et al., 2007; Rorie, 2007).

Creating a sense of belonging for students can lead to a decrease in dropout rates (Rorie, 2007). In addition, when students are challenged to take more academically rigorous curriculum, the safety nets that are provided through one-on-one interactions with teachers and other staff members, after school tutoring, study groups, and having an adult advocate in the educational setting diminish the chances of a student becoming "invisible" (Rorie, 2007).

Being enrolled in the AVID program presents academic challenges to students who may not have previously faced the burdens of a rigorous curriculum. Through the AVID program, students are provided with daily classroom interactions, an adult advocate through their AVID teacher, a counselor and an administrator, as well as staff that are trained in the AVID model. The AVID teacher is an invaluable resource to AVID. This teacher becomes the adult advocate for students as they develop a sense of

belonging (Whitaker, 2005). The AVID teacher is the liaison between administrators, counselors, and core curriculum teachers to continue AVID students' success in the quest for academic achievement and college admission (Whitaker, 2005). AVID students receive a curriculum rich in the integration of academic skills and strategies to promote and ensure their academic accomplishments in college preparatory courses (Rorie, 2007).

AVID students share many commonalities with their AVID peers. These common attributes and academic experiences aid in the sense of belonging for AVID students. The AVID elective class allows for students to develop friendships centered on academic goals and "new identities" (Mehan et al., 1996). AVID students learn specific note taking skills and test taking strategies, are enrolled in rigorous college preparatory course curriculum, complete application processes for colleges, financial aid, and scholarship applications, all while developing a new personal learning method. These many rites of passage in an educational journey, along with grappling to acquire the "hidden curriculum" of the educational process, bond AVID students together through a developed sense of family among the AVID classroom (Mehan, 1996).

Learning in the AVID classroom truly becomes autonomous for each individual student; a personalization of the program occurs for the AVID parent, too. Each year, AVID students and their parents are required to sign a contract that signifies their commitment to the AVID program. Signing the contract formalizes the parents' support and commitment to assist with their student's academic endeavors (Mehan et al., 1996). This portion of the AVID program functions to educate the students and the parents on what is expected of students pursuing higher education (Mehan et al., 1996).

Through the AVID class, everything focuses on postsecondary enrollment. In interviews with AVID graduates, it was found that AVID students have an increased consciousness regarding educational goals and occupational aspirations (Mehan et al., 1994). Mehan et al. (1994) attributed the success of the AVID program to more than the teaching methods and strategies utilized in the AVID classroom. Inherently, it is due to the social networks and scaffolds built inside the AVID classroom and among the AVID students and their AVID peers that are used to navigating the hidden curriculum and guide the AVID students to achieve success (Mehan, Willanueva, Hubbard, & Lintz, 1996). AVID was identified as a program to have a positive impact on dropout rates, college attendance, and school performance (Fashola & Slaivin, 1998). Through AVID, students who may have become "invisible" because of their previous academic performance, their parents' income, or educational levels can have access and be successful in rigorous course curriculum and college preparation (Swanson, 2000; Whitaker, 2005).

Tutoring and Inquiry in the AVID Program

AVID methodologies often lend themselves to unconventional tactics in instruction. AVID places great emphasis on students becoming self-sustaining learners. Inquiry has been known to enhance learning for ages (Rorie, 2007). Asking pointed questions to a person who is seeking information can often lead one to an answer they are trying to find (Rorie, 2007). While many philosophers have used thoughtful inquiry as a way to arrive at universal truths, educators have recently discovered that the value of insightful questioning and utilizing student-generated questions has proven to be an invaluable learning tool.

Using inquiry-based learning in classrooms creates a richer learning environment. Not only has it been found that a culture of inquiry is created among the learners, but a deeper understanding of learned concepts is developed (Predrosa de Jesus, Almeida, & Watts, 2004). Inquiry has been found to guide interactions and promote independent, thought provoking knowledge acquisition (Pedrosa de Jesus et al., 2004). This intrinsically motivated method of learning has increased the academic achievement of students (Rorie, 2007).

Inquiry-based learning is much more than students asking simple "yes/no response" or "correct answer only" driven questions. AVID students and tutors ask questions in a Socratic fashion that elicit responses which guide the original person asking the question or the group to discover the answer using reliance on personal knowledge. Likewise, students must know how to elaborate on shared material as they answer in order to lead the original person asking the question on a path to discovering the answer (King, 1990). Students' reliance on their prior knowledge to answer a question is what lends itself to developing new knowledge and to firmly root the knowledge that was previously acquired (King, 1990; Rorie, 2007). AVID finds that inquiry is one of the five methodologies used to accelerate student learning as part of the WICOR strategies (AVID Center, 2013f).

AVID's tutorial model is based on the practice of inquiry. Bi-weekly, in class tutoring sessions allow for students to lead an academic subject-based tutorial group in conjunction with a college attending, AVID-trained tutorial facilitator. Tutorial groups consist of five to seven AVID students paired with one AVID trained facilitator for each group. The AVID trained facilitator has been taught the AVID inquiry-based tutor

method, which AVID refers to as Tutorology. The facilitator and students ask insightful, thought provoking questions. The tutorial group is expected to help the student who asked the question derive an answer through a progression of insightful, thought provoking queries that require the person asking the original question to rely on previously acquired knowledge to answer the question that was asked (Bogan & Porter, 2005; Franklin, 2011; Lord & Baviskar, 2007; Nelson, 2007). Through the tutoring process, subject-specific groups are developed while an AVID trained facilitator assists students in each group to come to conclusions and answers through their own questions, notes, and previously acquired knowledge (Furgeson, 2006; Sundly, 2006). The tutor facilitator role is not to answer questions. Rather, their role is to continue to guide students to the answers through the questioning process (i.e., Socratic method) (Lockwood & Secada, 1999).

Inquiry as a tutoring method has been studied previously. In 1994, Graesser and Person studied inquiry as a tutoring method in a college statistics class (Rorie, 2007). The quality of questions and frequency of questioning by tutors was compared to the frequency and quality of student inquiry and student achievement (Graesser & Person, 1994). Students were found to utilize inquiry exponentially more in tutoring sessions than in the regular classroom environment. This could provide a reason why learning is said to increase in a tutoring environment due to enhanced learning opportunities through questioning (Graesser & Person, 1994).

Forty percent of the AVID elective class time is dedicated to tutoring. Tutors spend time working with students to develop individual academic achievement plans, develop a relationship based on collaborative inquiry, and assist AVID students with

tackling college entrance requirements (Rorie, 2007). In these sessions, students are taught to work collaboratively and discuss critical topics through inquiry (AVID Center, 2006). Aligned with Bruner's Discovery Leaning Theory, students used scaffolding of prior learning and experiences to analyze current questions and surmise solutions (Bruner, 1960; Franklin, 2011).

In addition to developing self-sustaining learners through inquiry-based tutorial sessions, AVID students acquire another adult advocate in their tutor. Tutoring sessions that occurred during the school day create a familial atmosphere among students and tutors, which increases self-efficacy and persistence toward goals of higher education and postsecondary successes (Watt et al., 2008).

Course Enrollment

The premise of AVID's success centers around providing academic strategies imbedded in rigorous coursework to those students who have academic deficiencies but have proven academic ability. Students who enter the AVID program are moved out of remedial courses and enrolled in Pre-Advanced Placement, Advanced Placement, and other college preparatory classes (Rorie, 2007). By removing students from less rigorous courses and placing students in more academically challenging, college preparatory classes, the AVID program promises to provide academic supports inside and outside of the AVID classroom to ensure students achieve success in their new found academic setting (Burris & Welner, 2005; Rorie, 2007; Ruben & Noguera, 2004; Wheelock, 1992). AVID's founder, Mary Catherine Swanson, acknowledged that removing students from remedial courses and placing them in academically rigorous courses is not enough to ensure success and will most likely result in academic failure. To the contrary, AVID

recognizes that students need supports in place to make the transition into these more challenging college preparatory classes easier (AVID Center, 2005).

Course taking patterns have changed through years. These pattern variances can be attributed to shifts in economic situations; fluctuations in the global economy where simply having a high school diploma may not be enough to obtain heralded career positions; greater expectations of parents for their child to receive the best education; and increased student performance standards with more demanding graduation requirements from state and national legislation (Mirel & Angus, 1994). Mathematics and science have proven to be courses that are required for the workforce. High school students are, in turn, enrolling in more demanding courses in these subject areas (Whitaker, 2005). Enrollment in the most challenging math curriculum by high school students doubled between the years of 1982 and 1998 (NCES, 2000). Enrollment in higher level science classes, such as students taking both chemistry and physics, increased by 12% over the same 16 year period (NCES, 2000). New graduation requirements demanded that students also consider taking Advanced Placement courses to be eligible for more prestigious diploma endorsements.

College Board's Advanced Placement program has experienced significant increases in student assessments on their college level testing (Whitaker, 2005).

Although enrollment in Advanced Placement courses has increased, especially among ethnic minority populations, students from various ethnic backgrounds maintain a significantly lower enrollment in college preparatory courses than their White counterparts, and they often perform at a lower level when they are enrolled (Gandara & Maxwell-Jolly, 1999).

Often times, course enrollment and success are attributed to tracking of students. Historically, students have been separated and received altered content based on tracking methods (Mehan et al., 1996). Tracking can take many different forms. Students have been categorized based on specific measures of intelligence such as academic ability (Jones, Vanfossen, & Ensminger, 1995; Wheelock, 1992).

AVID has been viewed as an "untracking program" (Hubbard & Mehan, 1998). AVID is a program that provides scaffolds and supports to assist historically underachieving students transition from remedial curriculum to challenging college preparatory academic courses (Hubbard & Mehan, 1998). Scaffolding was based on the belief that a more knowledgeable person could teach an individual what they need to know by providing the exact support needed to be successful (Bruner, 1975; Wood et al., 1976).

In a scaffold lesson, the more knowledgeable adult provides just enough academic support for the student to reach their goal through modeling, noting critical elements of the task or question, and provided clues that help the learner to think and reflect on what is learned (Wood et al., 1976). This three-tier approach allows for a common goal to be met between the instructor and the students through social, cognitive, and emotional learning. As the student acquires the knowledge and understanding, the expert holds less and less of a role, allowing the learner to understand how the knowledge was acquired in addition to the knowledge acquisition (Rogoff, 1990). Continual reflection on the task and possible solutions allow for the emotional connection between the learner and the expert (Wood et al., 1976). Key to the scaffolding process is that there is continual

reflection and support on the process. The reflection must be on the expert and the student's part (Hogan & Tudge, 1999).

When educators use scaffolding in their teaching, a supportive learning environment is created (Northern Illinois University [NIU], n.d.). Through scaffolding, teachers become facilitators of learning, and students' classmates become a support group to learning (NIU, n.d.). This technique has been used as both a method for re-teaching concepts, as well as initial instruction. Scaffolding allows for individualized instruction and encourages learning through discovery (NIU, n.d.). The individualization of scaffolding allows for learners to become better students, thus helping students to learn *how* to learn (NIU, n.d.).

In a 2004 study of 1,291 AVID students in Texas, it was found that 87% of all AVID students were enrolled in one or more college preparatory courses, and that longitudinally, AVID enrollment in Advanced Placement courses had increased (Watt et al., 2004). Students enrolled in the AVID program are B, C, and D students who are enrolled in a more rigorous course of study (AVID, 2013c). The AVID classroom creates a collaborative study environment for academic achievement among students who often previously lacked supports to succeed in academically rigorous coursework (Rothstein, 2001).

Students who take more rigorous mathematics courses in high school have a greater propensity to attend college. This is even greater among students from low-income families (Whitaker, 2005). Enrolling in a more rigorous mathematics curriculum for a student facing socioeconomic factors made them almost three times more likely to

attend college than those students from low income families that did not enroll in rigorous mathematics curriculum (NCES, 2000; Whitaker, 2005).

According to Smith (1996), the single largest predictor to students progressing through advanced mathematic courses and high school achievement was the achievement that students received in the early part of high school. This was based on two factors that he found to contribute to individual attainment: social background and experiences in outcomes (Smith, 1996). Enrollment in English courses throughout high school and college improved students' reading comprehension and writing skills (Whitaker, 2005).

College Preparatory Course Enrollment

Advanced Placement courses are rigorous, college preparatory classes that offer students the opportunity to earn college credit through the Advanced Placement exam while attending high school. Likewise, Dual Credit courses offer students the opportunity to earn college credit while in high school through school district partnerships with local community colleges. The rigorous curriculum and educational management skills that Advanced Placement and Dual Credit courses offer and require prepare students for the demands of postsecondary education.

Participation in Advanced Placement courses and other college preparatory classes by AVID students can help decrease the stereotyped beliefs that are held by some stakeholders in the educational process that students who struggle academically, but have academic potential, cannot be successful in these academic placements without proven academic success (Fincher-Ford, 1997). Support from counselors, teachers, administrators, and parents further increase students' aptitude for success in these courses (Fincher-Ford, 1997). High academic standards in these classes not only challenge AVID

students, but they also push to raise the expectation and course offerings to a broader range of students (Davis, 1996). Advanced Placement and Dual Credit course offerings allow students to have ownership in their academic path while preparing for postsecondary opportunities. These courses offer academic choices where students can see the value of their course selection for their academic future (Fincher-Ford, 1997; Hurwitz & Hurwitz, 2003).

AVID promotes a college-bound culture in its program and throughout the AVID curriculum. By requiring students to enroll in a college level curriculum, AVID proves that a college-seeking culture is a foundation for its program. Advanced Placement and Dual Credit course enrollment gives advantages to students enrolling in college (Hurwitz & Hurwitz, 2003). Not only are there cost savings for college courses, where credit has already been earned, but colleges also realize the aptitude for success of those students who have been enrolled in a rigorous curriculum. Colleges and universities, in turn, know that students who have been enrolled in an advanced curriculum bring those skill sets and academic endurance tactics already learned to college with them (Davis, 1996; Hurwitz & Hurwitz, 2003).

Students who participate in college preparatory courses such as Advanced Placement and Dual Credit classes have several academic advantages (Posthuma, 2010). Many teachers seek out opportunities to teach Advanced Placement courses. Teachers find that they are able to cover more topics, provide more depth to the lessons, and use a more interesting curriculum with courses that offer an advanced curriculum (Keiser, 2002). In turn, those who teach advanced curriculums have greater job satisfaction (Hale, 2007). Students who are enrolled in Advanced Placement and Dual Credit courses are

exposed to an enhanced curriculum with a consistently higher level of academic rigor similar to a college level course (Burris & Welner, 2005; Conchas & Rodriguez, 2008).

Students who have access to advanced curriculum are advantaged in college preparation. College Board & AVID both affirm that taking college courses, particularly Advanced Placement courses, prepare students for postsecondary success (Cota-Robles & Gordon, 1999; Posthuma, 2010; Swanson, 1997). Students who are enrolled in Advanced Placement classes are not only exposed to a more rigorous course of study, but they also are advantaged by a weighted grade point average and earned college credit if the student scores a three or higher on their AP exam (Solorzano & Ornelas, 2002).

Students who enroll in advanced courses of study are more likely to be successful in college. Advanced Placement courses are rigorous, college level courses that require adequate preparation. Students who scored a three or higher on their Advanced Placement exam earn Advanced Placement credit and are predicted to be successful in college (The College Board, 2010). When high school students were enrolled in at least one math class above the level of Algebra II, they were more likely to complete college regardless of their ethnicity (Adelman, 1999). Advanced Placement participation has been proven to have a direct and an indirect effect on college admissions criteria, and the skills that students learn while preparing for Advanced Placement courses are fundamentally more important than just access to the Advanced Placement course (Franklin, 2011; Klopfenstein & Thomas, 2006).

The National AVID Center collects data twice a year from AVID sites. Students and AVID site staff self-report data through an online database. The National AVID Center reports data and approximations on Advanced Placement enrollment

and Advanced Placement exams, as well as Dual Credit enrollment (AVID Center, 2015c; AVID Center, 2015d).

The National AVID Center reported the percentage of students that enrolled in one or more Dual Credit courses while in high school during 2009-2011. In the state of Texas, 37.5% of AVID students enrolled in one or more Dual Credit courses (AVID Center, 2015c). Nationally, 23.6% of AVID students enrolled in one or more Dual Credit courses during 2009-2011 (AVID Center, 2015c).

The National AVID Center collected data on Advanced Placement enrollment, exam participation, and Advanced Placement scoring through self-reporting (AVID Center, 2015c). During 2009-2011, 86.1% of the Texas AVID students self-reported enrollment in one or more Advanced Placement courses (AVID Center, 2015c). The mean number of courses taken (including the students who enrolled in zero courses) was 2.9 courses with a standard deviation of 2.2 (M=2.9, SD=2.2) (AVID Center, 2015c). Nationally, 71.7% of AVID students self-reported enrollment in one or more Advanced Placement courses (AVID Center, 2015c). The mean number of courses that AVID students enrolled in nationally (including those who enrolled in zero courses) was 2.1 courses with a standard deviation of 2.1 (M=2.1, SD=2.1) (AVID Center, 2015c).

During 2009-2011, 63.2% of Texas AVID students self-reported taking one or more Advanced Placement exams (AVID Center, 2015c). The mean number of exams taken (including those students who took zero exams) was 1.8 with a standard deviation of 2.1 (M=1.8, SD=2.1) (AVID Center, 2015c). Nationally, 60.0% of AVID students self-reported taking one or more Advanced Placement exams (AVID Center, 2015c).

The mean number of exams taken (including those who took zero exams) was 1.7 with a standard deviation of 2.0 (M=1.7, SD=2.0) (AVID Center, 2015c).

In the state of Texas from 2009-2010, there were approximately 5,694 AVID students in the eleventh grade (AVID Center, 2015d). According to the AVID Texas part II data collection, approximately 1,356 AVID students participated in an English Advanced Placement exam; 14% earned a score of three or higher (AVID Center, 2015d). Approximately 1,156 AVID students participated in a History Advanced Placement exam; 15% earned a score of three or higher (AVID Center, 2015d). Approximately 247 students participated in a Foreign Language Advanced Placement exam; 66% earned a score of three or higher (AVID Center, 2015d).

In the state of Texas from 2010-2011, there were approximately 4,849 AVID students in the twelfth grade (AVID Center, 2015d). According to the AVID Texas part II data collection, approximately 982 AVID students participated in an English Advanced Placement exam; 16% earned a score of three or higher (AVID Center, 2015d). Approximately 908 AVID students participated in a History Advanced Placement exam; 16% earned a score of three or higher (AVID Center, 2015d). Approximately 219 AVID students participated in a Foreign Language Advanced Placement exam; 62% earned a score of three or higher (AVID Center, 2015d).

The National AVID Center reported the percentage of students that enrolled in one or more Dual Credit courses while in high school during 2009-2011. In the state of Texas, 37.5% of AVID students enrolled in one or more Dual Credit courses (AVID Center, 2015c). Nationally, 23.6% of AVID students enrolled in one or more Dual Credit courses during 2009-2011 (AVID Center, 2015c).

In 2003, a four-year longitudinal study was conducted comparing students at AVID campuses to students on campuses who were not exposed to the AVID program. The schools were similar in size, demographics, region, and accountability ratings. The AVID students' enrollment in Advanced Placement courses was greater than those at the non-AVID campuses. AVID students had higher graduation and completion rates and an improved number of students graduating on advanced graduation plans. Accountability ratings increased, and schools showed reform through AVID (Watt et al., 2006).

Graduation Programs

In recent years, standards to increase education quality for all students have grown. In 2006, Texas adopted a four-by-four curriculum model requiring all students, regardless of the graduation plan, to take four consecutive years of math, four consecutive years of science, four consecutive years of ELA/English, and four consecutive years of social science courses (TEA, 2009). Starting in 2008, all students beginning their ninth grade year were required to take a minimum of these core courses, in addition to their elective courses, to qualify for graduation. In addition, the state added standards that required a College Credit Program to be implemented by school districts that made available to students a minimum of twelve semester hours of college credit (Franklin, 2011; TEA, 2009). These college hours could come from a combination of Advanced Placement courses, International Baccalaureate courses, or Dual Credit courses (Franklin, 2011; TEA, 2009).

From these requirements, levels of graduation were developed for students. A student graduating as a Recommended high school graduate is required to complete a course of study that includes 26 credits. Of the 26 high school credits that a student is

required to earn, 20.5 need to be dedicated to core courses and five and a half credits could come from elective courses (TEA, 2010a). In addition to the four core classes to be taken consecutively over the four years, students are required to successfully complete two credits of a foreign language, one credit of physical education, one credit in a fine arts course, and a half credit of speech (TEA, 2010a). These dictated courses count toward the 20.5 courses required in the core course curriculum. Although a student has five and a half elective credits to choose from, the courses must still be approved courses by the Texas State Board of Education (TEA, 2010a).

The Distinguished Achievement Program is a course of study that requires additional achievements beyond the normal course credits that are required of students graduating from high school. In addition to more course credit requirements, students who received a Distinguished Achievement Program commendation on their diploma must also have completed four advanced measures. These measures must show that the student is capable of producing college-level work on Advanced Placement exams or its equivalent as evaluated by external sources: colleges, business, and industry professionals (TEA, 2011). In addition to the extra requirements, the academic core courses are prescriptive. For instance, in math a student is required to take Algebra I, Algebra II, and Geometry, or in science, each student is required to complete Biology, Chemistry and Physics (TEA, 2011).

The Texas Education Agency longitudinally studied students who entered the ninth grade in 2007-2008 in order to assess their graduation, completion, and dropout rates. There were 319,588 students studied. Of the 319,588 students, 274,562 students graduated in 2011, a rate of 85.9% (TEA, 2012). When looking at graduates from the

class of 2011, 232,809 students, or 80.1%, graduated as either a Recommended or Distinguished graduates, and 57,772, or 19.9%, graduated as part of the Minimum high school program.

A student that does not graduate within four years, but continues their enrollment in high lacks either course credit and/or minimum passing standards on state mandated testing. There were 19,757 students, 6.2% of the original class that were considered to have continued in high school past their intended graduation date (TEA, 2012). For reporting purposes, 294,319 students either completed high school by graduating with a diploma or continued in high school to complete the necessary requirements (TEA, 2012). This group comprised 92.1% of the original class number of 319,588 students (TEA, 2012). When combined with those students who received a GED, the completion number rose to 297,775, or 93.2% (TEA, 2012). There were 3,456 students, or 1.1%, who were documented to have received a GED, and 21,813 students, or 6.8%, who dropped out of high school (TEA, 2012).

Theoretical Framework

Evaluating a program with many stakeholders requires a comprehensive and objective evaluation model that can systematically and continually assess all facets of the program before, during, and after implementation. According to Zhang et al. (2011), there are approximately 26 evaluation models that can be used to conduct a program evaluation. Daniel L. Stufflebeam's Context, Input, Process, and Product (CIPP) Evaluation Model was created to assess the effectiveness of a program from conception through completion or continuance (Zhang et al., 2011). The CIPP Evaluation Model provides a theoretical framework for conducting and reporting comprehensive program

evaluations (Stufflebeam, 2000) and is one of the most widely used approaches to program evaluation (Zhang et al., 2011).

The CIPP Model for Evaluation was designed for both evaluator and stakeholder as a guide for relevant assessment and questioning of programs prior to implementation, while in progress, and at completion (Zhang et al., 2011). The CIPP Model for Evaluation is comprised of four central concepts for evaluation: context, input, process and product evaluation (Stufflebeam, 2000). These four evaluation methods can be conducted independently or interdependently, but they are inherently interrelated (Stufflebeam, 2000). Stufflebeam (2000) described the singular use of portions of the CIPP Evaluation Model:

At first glance, the CIPP Model provides for an orderly succession of four different types of studies that help in planning and conducting successful projects and programs and other services. However evaluation and change efforts are seldom neat, orderly, linear activities. It would be a mistake to assume that evaluators should always formally conduct context, input, process and product evaluations in that order. (p. 301)

Each area of the CIPP Evaluation Model collects and evaluates specialized information. The context evaluation assesses the readiness for program implementation based on environmental needs (Stufflebeam, 2000; Zhang et al., 2011). The input evaluation delineates programs suited to make desired changes and recommended approaches to respond to the desired plan (Stufflebeam, 2000; Zhang et al., 2011). The evaluation of implementation of the program is the process evaluation, and the product

evaluation describes the program outcomes, whether they be intended or unintended (Stufflebeam, 2000; Zhang et al., 2011).

Conducting a product evaluation of the AVID program can be crucial in answering program achievement questions. With the product evaluation of the CIPP Evaluation Model, the question of "Did the project succeed?" is addressed (Zhang, 2011). This evaluation measures the achievements to quantify the rate of successfulness of the program (Stufflebeam, 2000; Zhang, 2011). The product evaluation addresses the intended and the unintended outcomes of program implementation (Stufflebeam, 2000).

According to Stufflebeam (2000), "Product evaluations follow no set algorithm, but many methods are applicable" (p. 298). Stufflebeam (2000) suggests a variety of evaluation methods such as comparison of test scores, consideration of specific standards, and the 'cross-checking' of outcomes. The product evaluation provides data on program outcomes and provides information for stakeholders to decide if the achievements of the program warrant continuance (Stufflebeam, 2000).

The CIPP Model for Evaluation allows for an objective assessment of a program throughout the evaluation process (Stufflebeam, 2000). According to Stufflebeam (2000), "the CIPP Model calls for identifying the multiple, often hierarchical program or project components and audiences and addressing them both individually and holistically" (p. 282). Following the CIPP Evaluation Model empowers administration, staff, and a variety of stakeholders to have continual objective assessment of program accountability measures, oversight in improvement in the program processes, remediation opportunities in ineffectively implemented practices, and collaboration of shared knowledge to help the program flourish (Stufflebeam, 2000).

Summary

High school students face many challenges that can become roadblocks to graduation. As mandated, public schools are confronted with closing achievement gaps that occur. Many schools look for the "package program" to increase the achievement of the historically underachieving student. AVID, as shown in the literature, can be a program to increase achievement through many facets of a student's education. AVID methodologies, supported by research, hold the promise of instilling academic strategies and self-sustaining learning in students.

AVID strives to close the achievement gap by taking students who are in remedial or lower level academic classes, but have proven academic potential, and places them in a college preparatory curriculum with holistic academic supports to ensure success. The AVID program works to create a familial atmosphere through a personal advocate for AVID students, the AVID teacher, and collaborative learning groups among peers. The goal for each student is always focused on four-year college or university enrollment.

This study may benefit educators as they review programs that promise to close the achievement gap between struggling learners and high achieving students. Through the analysis and evaluation of the educational achievement of the AVID program in a midsized Gulf Coast school district, this study describes the educational differences between those students who were selected for AVID and maintained four-year enrollment in the program compared to non-AVID students. Following the theoretical framework of the CIPP model, outcomes of student achievement and growth will be shared. This study provides useful information that can serve as contextual dataset to administrators and

stakeholders of midsized school districts that are considering implementing the AVID program.

CHAPTER THREE

METHODOLOGY

Introduction

Improving the academic performance of students who are failing to reach their academic potential is the immediate charge of campuses and districts looking to promote educational success among all of their students. Many programs exist promising to decrease drop out rates, close achievement gaps, and remediate failing students. The AVID program avows to give schools tools to identify those students who have distinguishable academic potential and increase their academic performance through a comprehensive educational advancement program. This study assesses the effectiveness of the AVID program as an approach to closing the achievement gap.

Problem and Purpose Overview

The purpose of this study is to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. This study determines the educational differences for those students who were selected for AVID and chose to follow through with acceptance compared to non-AVID students. This study was conducted following the theoretical framework of the product evaluation portion of the CIPP Model for Evaluation, where the researcher evaluated percentages and frequencies that emerged from the review of archival data to determine outcomes. Assessment of the archival data allowed the researcher to describe student achievement and growth through the specific measurements: (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through

Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs. Descriptive statistics were used to determine the success of AVID as an academic intervention program when AVID students are compared to non-AVID students.

The research methodology of the study is presented in this chapter. A description of the participants and an overview of the framework of the school district and instructional environment provide the necessary footing for the reader to garner familiarity with the population and setting to be studied. Chapter Three will conclude with the explanation of the data collection method, acknowledgement of instrumentation, and a review of the descriptive statistics that were used by the researcher to conduct the study.

Participants

There were two groups of participants studied for this program evaluation. The first group of participants in this study was those students who were accepted to the AVID program at the start of the 2007 school year, entering ninth grade, and maintained enrollment in the AVID program through graduation. One hundred students continuously participated in the AVID program from 2007-2011. The second group of participants in this study was those students who were enrolled in Standard ISD from 2007-2011, but were never enrolled in AVID. This group of students numbered 2,027.

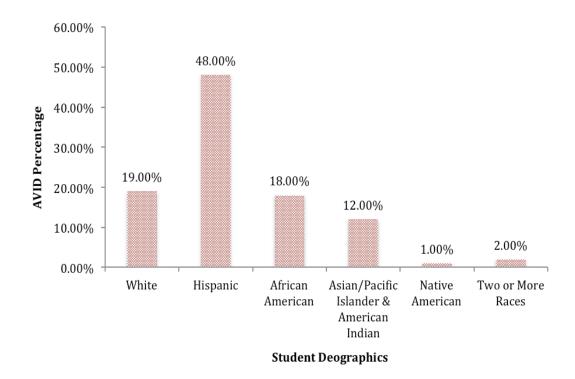
Students from Standard ISD were preselected for the opportunity to apply for acceptance in the AVID program based on an AVID score derived from state normed testing, academic achievement determined by grades, attendance, discipline, and recommendations from teachers, counselors, and administrators. Preselected students

were invited to attend an informational meeting with their parents/guardians in the spring semester of 2007. Once students chose to apply, they were then required to participate in an interview with their respective high school campus's AVID site team. Through collaboration of the AVID site team, AVID teacher, AVID coordinator, and AVID counselor, students were chosen for AVID based on their AVID score, application, interview, and the deliberations of the committee. Upon their enrollment in AVID, this group of students became the first AVID cohort in Standard ISD. The four high schools within Standard ISD accepted students to begin the AVID program in the fall of 2007, as freshmen entering high school, and allowed for continuous enrollment in the AVID program and through graduation in 2011.

There were 2,308 students in the district's 2007-2008 cohort who completed four years of high school in Standard ISD. Of the 2,308 students that maintained four-year enrollment in Standard ISD, 100 of these students maintained four-year enrollment in the AVID program; 2,027 students were never enrolled in AVID. Nineteen percent of AVID students were White, 48% were Hispanic, 18% were African American, 12% were Asian/Pacific Islander, 1% were Native American, and 2% were Two or More Races. Figure 3.1 represents the demographics for the AVID students.

Figure 3.1

AVID Student Demographics 2010-2011

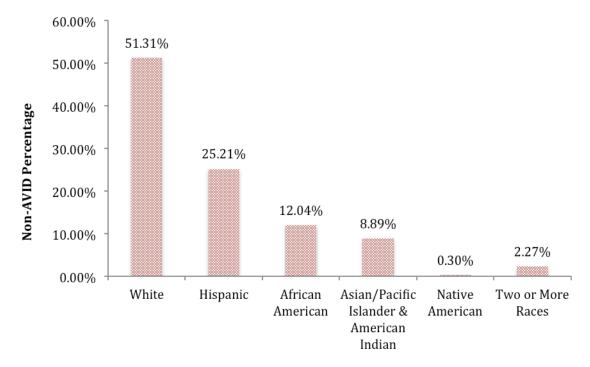


Note: n=100 AVID Students

When looking at the non-AVID students in Standard ISD, 51.31% were White, 25.21% were Hispanic, 12.04% were African American, 8.89% were Asian/Pacific Islander, 0.30% were Native American, and 2.27% were Two or More Races. Figure 3.2 represents the demographics for non-AVID students.

Figure 3.2

Non-AVID Student Demographics 2010-2011



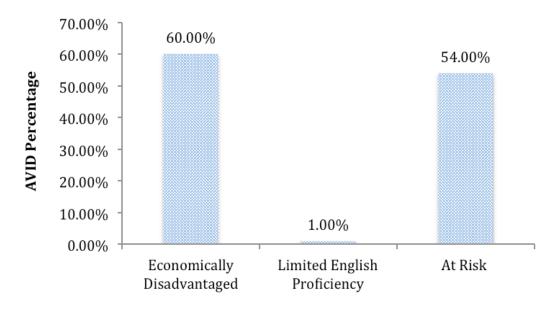
Student Demographics

Note: n=2027 non-AVID Students

Among AVID students, 60.00% were Economically Disadvantaged, 1.00% were Limited English Proficiency, and 54.00% were At Risk. Figure 3.3 illustrates the AVID student population by group.

Figure 3.3

AVID Student Population by Groups 2010-2011



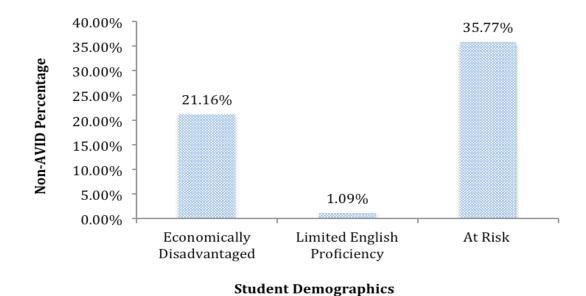
Student Demographics

Note: n=100 AVID Students

For Standard ISD's non-AVID group, 21.16% were Economically Disadvantaged, 1.09% were Limited English Proficiency, and 35.77% were At Risk. Figure 3.4 illustrates the non-AVID student population by group.

Figure 3.4

Non-AVID Student Population by Groups 2010-2011

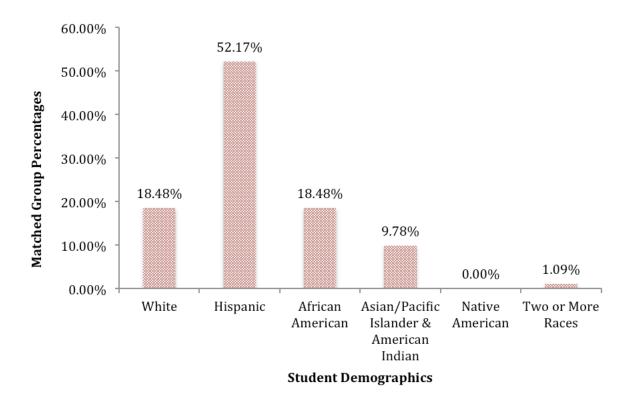


Note: n=2027 non-AVID Students

AVID students in Standard ISD and non-AVID students from Standard ISD were matched-paired based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting group was 92 AVID students matched to 92 non-AVID students from Standard ISD. The two studied groups from Standard ISD began the ninth grade in Standard ISD in the fall semester of 2007. The students were from the same school district and remained in the district through the 2011 school year.

In the matched-paired group of AVID and non-AVID students, 18.48% were White, 52.17% were Hispanic, 18.48% were African American, 9.78% were Asian/Pacific Islander, 0.00% were Native American, and 1.09% Two or More Races. Figure 3.5 illustrates the demographics for the matched group of AVID and non-AVID students.



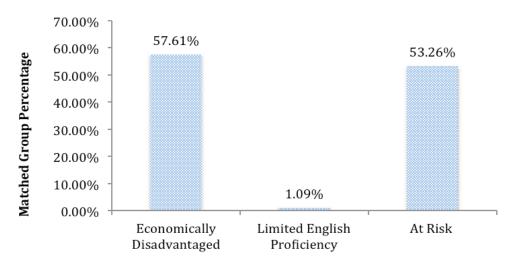


Note: n=92 AVID Students and 92 Non-AVID Students

By group, the matched-paired students from the AVID and non-AVID students were 57.61% Economically Disadvantaged, 1.09% Limited English Proficiency, and 53.26% At Risk. Figure 3.6 represents the matched group's population by group.

Figure 3.6

Matched Group Student Population by Groups 2010-2011



Student Demographics

Note: n=92 AVID Students and 92 Non-AVID Students

Each student studied remained in Standard ISD's AVID program from 2007 until completion of the four-year cohort in 2011. Of the 2,308 students that attended Standard ISD as part of the 2007-2008 cohort, 100 students were continuously enrolled in the AVID program for four years. Sixty-five of the students were female and 35 of these students were male. Nine hundred and eighty-two of the 2,027 non-AVID students were female and 1,045 were male students. The matched-paired AVID and non-AVID student groups had 63 female students and 29 male students each.

Study District and Instructional Environment

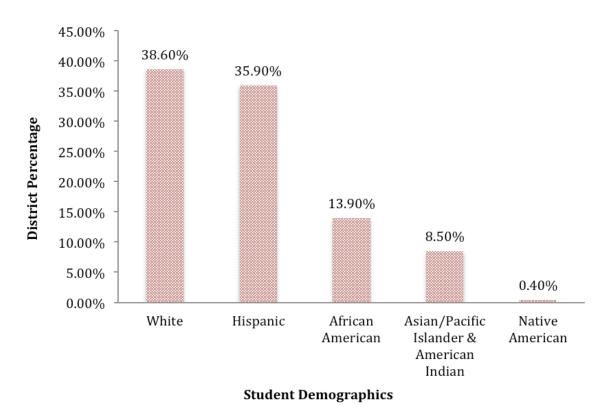
The school district studied is a midsized suburban school district located north of a major metropolitan area in the Gulf Coast region of Southeast Texas. The district is comprised of 30 elementary schools, nine intermediate schools, and four high schools. The district experienced an average annual growth of 1,200 to 1,500 students. The

district studied offers a full range of academic enrichment programs for students of differing abilities. These programs include, but are not limited to, advanced educational placements, occupational therapy, special education, and bilingual programs. An extensive offering of athletic, career and technology, and fine arts courses compliment academic enrichment courses.

As mandated by the National AVID program, the AVID elective course occurred during the regular school day, and students were awarded state elective credit for each AVID course they completed. A teacher trained by AVID in AVID methodologies and practices taught the AVID course. Students had access to an AVID trained tutor and tutoring sessions during the AVID elective course twice a week. The tutor conducted tutoring sessions in small groups, as directed by an AVID curriculum. The remaining three days of the instructional week, students were taught using an AVID curriculum that promoted college readiness and instructional strategies to increase success in academically rigorous settings. Students in the AVID program had access to an AVID trained counselor for course scheduling. AVID students, through the direction of AVID, were enrolled in academically rigorous courses.

As reported by the Texas Education Agency, the demographic breakdown for the district in the 2010-2011 school year was 38.6% White, 35.9% Hispanic, 13.9% African American, 8.5% Asian/Pacific Islander, and 0.4% American Indian. Figure 3.7 represents the student demographics.





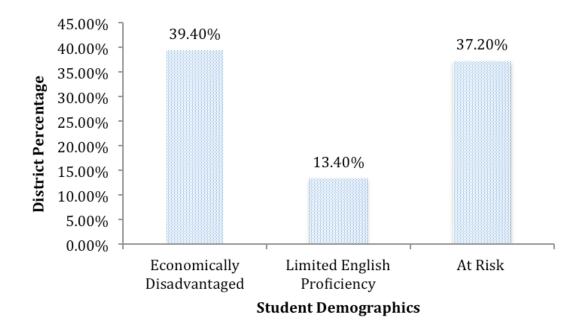
Source: Texas Education Agency Academic Excellence Indicator System 2010-2011

District Profile

During the 2010-2011 school year, 45,092 students attended Standard ISD. Of the 45,092 students, 39.4% were identified as Economically Disadvantaged, and 13.4% were identified as Limited English Proficiency. In 2010-2011, 37.2% of the student population was identified as At-Risk. Figure 3.8 represents the student population by group.

Figure 3.8

Standard ISD District Population by Groups 2010-2011



Source: Texas Education Agency Academic Excellence Indicator System 2010-2011

District Profile

Data Collection Procedures

The archival data collected from Standard ISD were comprised of the campus students attended, student ethnicities, gender, at risk status, special education classification, economically disadvantaged category, gender, AVID course enrollment by year, number of days absent, number of disciplinary referrals, grade point averages upon graduation, class rank, Advanced Placement and Dual Credit course enrollment and course grades, results from Advanced Placement exams, results from Exit Level Texas Assessment of Knowledge and Skills (TAKS), and graduation date with diploma endorsement earned noted. The data were collected from the district with all personal identifiers removed.

The archival data were obtained from the district's Data, Research and Evaluation Officer in the Research, Accountability and Data department. The data were disaggregated by student enrollment in AVID and students who were never enrolled in AVID (non-AVID). Archival data for the 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years were studied.

Research Questions

The specific research questions for this study are:

- 1. Do AVID students have higher average daily attendance than non-AVID students?
- 2. Do AVID students receive less disciplinary referrals than non-AVID students?
- 3. Do AVID students have higher grade point averages than non-AVID students?
- 4. Do AVID students earn more college credits through the Advanced Placement program than non-AVID students?
- 5. Do AVID students earn more college credit through the Dual Credit program than non-AVID students?
- 6. Do AVID students have higher graduation rates than non-AVID students?

Instrumentation

Archival data were used to describe the differences in educational achievement among students enrolled in the AVID program over a four-year period compared to students not enrolled in AVID. Student achievement was described through (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned

through Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

Student Attendance. A high absentee rate can have a direct correlation to a student dropping out of high school. A student not meeting the state's compulsory attendance laws may face legal prosecution. A student who fails to attend school on a regular basis can be denied credit for a course because of the failure to meet attendance requirements for graduation.

Disciplinary Referrals. Lack of comprehension and being academically unsuccessful can change the way a student reacts to their school day. Feelings of failure and increasing self-doubt can cause a student to act out, often inappropriately, to an uncomfortable academic situation. Increased academic support through scaffolding, peer relationships, and a sense of belonging creates a personalized educational experience, thus decreasing disciplinary referrals.

Grade Point Average. Student access to academically rigorous courses can predetermine a student's grade point average. Grade point averages are also a determining factor of class rank at graduation. These calculations can determine the institute of higher education that a student attends and are directly related to the courses that a student takes. Grade point averages in Standard ISD were determined based on a semester grade and assigned a numeric value for a certain grade earned in the course. Weighted grade points were assigned for specific courses, such as Advanced Placement, Pre-Advanced Placement, and Honors/GT. Specific courses receiving weighted grade points were outlined in the student handbook. Grade point averages in Standard ISD

were formally calculated in the junior and senior year and presented to the student. For the purpose of this study, grade point averages for graduating seniors were described.

Advanced Placement and Dual Credit Course Enrollment and College Credit Earned. As listed in Standard ISD Course Guidelines for 2010-2011, Advanced Placement courses are available for the academically successful student or any student willing to take on the challenge of an academic course. The Advanced Placement course offers collegiate level curriculum while giving the student enrolled the opportunity to earn college credit through the Advanced Placement Exam (Standard ISD Course Guidelines, 2010). Typically, Advanced Placement courses are available to juniors and seniors, but they can be offered to sophomores or freshmen. For the purpose of this study, only Advanced Placement courses and exams taken during a student's junior and senior year were assessed. A score of three or higher constitute college credit earned through Advanced Placement examinations when describing student achievement in this study.

Dual Credit courses allow high school students to take courses offered by a partnered community college to earn college credit. A teacher, certified by the partnered community college, teaches the course at the high school campus. Dual Credit courses do not require an examination to earn college credit like Advanced Placement courses, but a student must meet the entrance requirements of the partnered college. A student enrolled in a Dual Credit course can obtain high school credit without earning college credit. The student must meet the community college grade requirements in order to earn college credit.

Texas Assessment of Knowledge and Skills. The standardized test administered to Texas students to determine the minimum level achievement of the Texas Essential Knowledge and Skills (TEKS). TAKS scores were presented to students in the form of a scale score based on the raw score. Scale scores are weighted based on the difficulty level of the question (TEA, 2011).

Students were administered the TAKS at various points in their academic career. This study assesses the Exit Level TAKS. The Exit Level TAKS was administered to students in the 11th grade. Once a high school student had acquired 11 or more course credits, they were eligible to take the Exit Level TAKS. Traditionally, the Exit Level TAKS was administered to 11th grade students during the spring semester of their junior year. The only circumstance when a student would be administered the TAKS prior to the spring semester of their junior year would be if the student was eligible for early graduation and had not acquired 11 or more credits prior to the spring administration of that academic year. The student would be eligible to test once 11 credits were earned.

The Exit Level TAKS was administered in the subjects of English/language arts, math, science, and social studies. Students who entered the ninth grade in 2007 were required to pass all four portions of the TAKS in order to be eligible for graduation. A passing score for the TAKS was a scale score of 2100 or greater on each portion of the test. Students who earned a scale score of 2200 or higher on any portion of the TAKS were considered to have earned Commended Performance. First time freshmen across the state of Texas in 2010-2011 were the last cohort required to meet the passing standard on the Exit Level TAKS for graduation.

Graduation Rates. High school graduation rates are determined by dividing the number of students that graduate within four years of entering high school into the number of students who began with the cohort. Students who entered the ninth grade in the fall semester of 2007 were slated to graduate in the spring of 2011. According to TEA, students who entered high school in 2007 were eligible to graduate upon earning a minimum of 22 credits (TEA, 2010b). In the studied district, the expectation was that students earn a minimum of 26 credits (Standard ISD Course Guidelines, 2010); however, state requirements in 2011 stated that students could graduate earning a minimum of 22 credits. Three graduation plans were available to students:

Minimum High School Program. Students graduating under the Minimum High School Program were required to earn 22 credits. These credits were to be a combination of four English credits, three mathematics credits, two science credits, two and one-half social studies credits, one-half economics credit, one academic elective credit, one physical education credit, one-half speech credit, one fine arts credit, and six and one-half elective course credits (TEA, 2010b).

Recommended High School Program. Students graduating under the Recommended High School Program were required to earn 26 credits. These credits were to be a combination of four English credits, four mathematics credits, four science credits, three and one-half social studies credits, one-half economics credit, two languages other than English credits, one physical education credit, one-half speech credit, one fine arts credit, and five and one-half elective credits (Standard ISD Course Guidelines, 2010, p. 6).

Distinguished Achievement Program. Students graduating under the

Distinguished Achievement Program were required to earn 26 credits. These credits

were to be a combination of four English credits, four mathematics credits, four science

credits, three and one-half social studies credits, one-half economics credit, two

languages other than English credits, one physical education credit, one-half speech

credit, one fine arts credit, and five and one-half elective credits. Distinguished

Achievement required that students acquire four advanced measures. Advanced

measures were derived from a combination of the following:

- completion of an original research project that is related to the course of study under the TEKS, approved by Standard ISD faculty, conducted under the direction of the mentor, and judged by a panel of professionals in the field that is the focus of the project;
- 2. a score of three or higher on Advanced Placement exams;
- 3. a score of four or above on an International Baccalaureate exam;
- 4. college courses and tech prep articulated courses with a grade of 3.0 or higher;
- 5. a score on the PSAT exam that qualifies a student for recognition as a Commended Scholar or higher by the National Merit Scholarship Corporation, National Hispanic Scholar Program of The College Board, or as part of the National Achievement Scholarship Program for the Outstanding Negro Students of the National Merit Scholarship Corporation (Standard ISD Course Guidelines, 2010, p. 7).

Data Analysis Procedures

This study utilized descriptive statistics to evaluate the AVID program of a midsized Gulf Coast school district. Percentages and frequencies were derived from archival data to determine what effects four-year enrollment in the AVID program had on student achievement compared to matched-paired students who were not enrolled in AVID. A review of the archival data obtained allowed the researcher to present the percentages and frequencies that emerged in the investigation of student attendance, disciplinary referrals, academic achievement through grade point averages, college credits that students earned through Advanced Placement and Dual Credit courses, Exit Level TAKS scores, and graduation rates.

Ethical Assurances

Archival data, without student identifiers, were obtained from the district's Data, Research and Evaluation Officer in the Research, Accountability and Data department. Permission was obtained to conduct research from the district's Associate Superintendent of Instruction and Student Services (refer to Appendix A) and the University of Houston's Division of Research (Appendix B). Data were requested in the spring of 2015. Data were stored electronically and will be deleted upon completion of the study.

Summary

Chapter Three provides the reader with information to become familiarized with the study's participants and the instructional environment. The explanation of the instrumentation and methodology of the study provides the reader with the information necessary to understand the structure of the study and the measurements of student achievement used to evaluate the AVID program.

CHAPTER FOUR

RESULTS

The purpose of this study was to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. This study compared AVID students who maintained four-year enrollment in the AVID program to students who were enrolled in Standard ISD for four years, but not enrolled in the AVID program. AVID students and non-AVID students were matched-paired. Through this comparison, the study described the academic achievement differences between those students who participated in the AVID program for four years and a matched group of students who did not participate in AVID. The academic achievement descriptors studied included (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

The cohort of AVID students and non-AVID students started the ninth grade in 2007 and remained together through the twelfth grade in 2011. The ultimate goal was to show outcomes of the AVID program through the academic achievement differences between students who participated in the AVID program and students who did not participate in AVID. Archival data were examined from the 2007-2011 school years.

In this chapter descriptive statistics were used to answer the following questions:

1. Do AVID students have higher average daily attendance than non-AVID students?

- 2. Do AVID students receive less disciplinary referrals than non-AVID students?
- 3. Do AVID students earn higher grade point averages than non-AVID students?
- 4. Do AVID students earn more college credits through the Advanced Placement program than non-AVID students?
- 5. Do AVID students earn more college credit through the Dual Credit program than non-AVID students?
- 6. Do AVID students have higher graduation rates than non-AVID students?

The researcher used: (1) students' daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement exams and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs to analyze and evaluate the data of Standard ISD AVID and non-AVID students.

Research Question One:

Do AVID students have higher average daily attendance than non-AVID students?

The researcher studied the average daily attendance of AVID students compared to non-AVID students over the four-year period from 2007-2011. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

AVID students, over the course of four years, had a decline in their attendance. In their freshman year, the average daily attendance percentage of AVID students was 97.1%. Each year, AVID students' attendance declined slightly. During their sophomore year, the average daily attendance was 96.61%; during their junior year, the average daily attendance was 96.05%; and during their senior year, the average daily attendance was 94.92%.

Non-AVID students had a decline in attendance as well from 2007-2011. During their freshman year, non-AVID students had an average daily attendance rate of 96.61%, slightly lower than the 97.17% average daily attendance of AVID students. During their sophomore and junior years, non-AVID students had the same average daily attendance as AVID students, 96.61% and 96.05% respectively. When comparing the non-AVID students' senior year average daily attendance to the AVID students, the AVID students' average daily attendance was 0.57% higher than the non-AVID students. Table 1 depicts the average daily attendance for the AVID and non-AVID student groups.

Table 1

Average Daily Attendance

		AVID				Non AVID			
		Percentage Percentage Percentage		Percentage		Percentage			
Grade	Days	of Days	Days	of Days	Days	of Days	Days	of Days	
Level	Absent	Absent	Present	Present	Absent	Absent	Present	Present	
9 th	5	2.82%	172	97.17%	6	3.39%	171	96.61%	
10^{th}	6	3.39%	171	96.61%	6	3.39%	171	96.61%	
11 th	7	3.95%	170	96.05%	7	3.95%	170	96.05%	
12 th	9	5.08%	168	94.92%	10	5.65%	167	94.35%	

Note. 177 days in the year for 2007-2008, 2008-2009, 2009-2010, and 2010-2011. ${}^{a}n$ =92 AVID students. ${}^{b}n$ =92 *Non-AVID Students*

The differences between the AVID students and matched-paired, non-AVID students were very small. During these students' sophomore and junior years, there were no differences in the average number of absences between the AVID students and the non-AVID students. The AVID students did have higher attendance rates during their freshman year (0.56%) and their senior year (0.57%). This does support research conducted by Watt et al. (2006) that suggests AVID students have greater attendance rates, but it does not support research conducted by Watt, Powell, and Mendiola (2004) that suggests AVID students had attendance rates almost 5% greater than their non-AVID peers.

Research Question Two:

Do AVID students receive less disciplinary referrals than non-AVID students?

The researcher studied the comparison of received disciplinary referrals of AVID students and non-AVID over the four-year period from 2007-2011. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

During their freshman year, 21 (22.83%) AVID students received one or more disciplinary referrals. The number remained the same for the sophomore year. During their junior year, 20 (21.74%) students received one or more referrals, and during their senior year, the largest number of AVID students received one or more referrals, 24 students (26.09%). The number of AVID students receiving referrals did not consistently decline. The number of AVID students receiving referrals was less than non-AVID students receiving referrals each year.

The non-AVID students had a higher number of students receiving referrals each year when compared to AVID students. As depicted in Table 2, 46 (50.00%) non-AVID freshman received referrals. Non-AVID students had a decline in students receiving one or more referrals during their sophomore year, 39 (42.39%). During the junior year, 37 (40.22%) of non-AVID students received one or more referrals, and during their senior

year, 35 (38.04%) of non-AVID students received one or more referrals.

The non-AVID students received a greater number of referrals than the AVID students. Non-AVID students received 130 more referrals than AVID students during their ninth grade year, 94 more referrals during their sophomore year, 155 more referrals during their junior year, and 68 more referrals during their senior year. Non-AVID students had a decline in referrals received each year, while AVID students had a greater number of received referrals every year when compared to their freshman year, except for their sophomore year, where the number remained the same as their freshman year at 21.

There was no increase or decrease in referrals received during the AVID students' sophomore years when compared to their freshman year. There was a decrease in referrals earned during the AVID students' junior year when compared to their sophomore year, but it was still higher than their freshman year. AVID students earned the most referrals during their senior year. Table 2 depicts the number of students receiving referrals and the average amount of disciplinary referrals received each year by the AVID and non-AVID student groups.

Table 2

Average Amount of Disciplinary Incidents-AVID & Non-AVID students

		AVID			Non-AVID			
		Number	Percent	•		Number	Percent	
Grade	Number of	Receiving	Receiving		Number of	Receiving	Receiving	
Level	Referrals	Referrals	Referrals		Referrals	Referrals	Referrals	
9 th	41	21	22.83%		171	46	50.00%	
10 th	66	21	22.83%		160	39	42.39%	
11 th	43	20	21.74%		158	37	40.22%	
12 th	50	24	26.09%		118	35	38.04%	

Note: ${}^{a}n=92$ AVID students. ${}^{b}n=92$ *Non-AVID Students*.

The differences of referrals received between AVID students and matched-paired, non-AVID students were noteworthy. While the number of AVID students receiving referrals did not decrease consistently each year, the number of students receiving referrals was considerably lower than the non-AVID students. The number of referrals that the AVID students received did not decrease consistently either, but the number of referrals received was considerably lower than the number of referrals received by non-AVID students. This is consistent with the findings of Cox (2008), in which AVID students were shown to have statistically fewer disciplinary referrals, more than 50%, when compared to their non-AVID peers. According to the data presented in Table 2, non-AVID students were shown to have received more than four times the amount of referrals than AVID students received during their freshman year, more than two times the amount of referrals the AVID students received during their sophomore year, more

than three and a half times the amount of referrals the AVID students received during their junior year, and more than two times the amount of referrals the AVID students received during their senior year.

Research Question Three:

Do AVID students earn higher grade point averages than non-AVID students?

The researcher studied the comparison of grade point averages between AVID students and non-AVID at graduation in 2011. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

The median grade point average for AVID students at graduation was 3.63. This grade point average was calculated on a 6.0 weighted scale to account for Advanced Placement and Honors/GT courses. When compared to the non-AVID students, the AVID students' grade point average was higher. The median grade point average for the matched-paired, non-AVID students was 3.41, or 0.22 points less than their AVID peers as represented in Table 3.

Table 3

Grade Point Average

	AVID	Non-AVID
Grade	Average GPA	Average GPA
12 th	3.63	3.41

Note. Grade Point Average calculated on a 6.0-weighted scale only available for 12th grade. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID Students

To further address the third research question, students' class rank at graduation was evaluated. Grade point average directly affects a student's graduating class rank. A higher grade point average earned by a student in comparison to their classmates determines a student's class rank. The most desirable class rank is number one in the graduating class. Students graduating in the top 10 students of their graduating class are given special commendation in Standard ISD. As depicted in Table 4, there was one AVID student who was ranked in the top 10 students of the graduating class for their campus. There were zero non-AVID students ranked in the top 10 students of the graduating class for their graduating class for their campus.

Number of Graduates in the Top 10 Students of Graduating Class

Table 4

AVID Participation	Number of students in Top 10	Percent	
AVID	1	1.09%	
Non-AVID	0	0.00%	

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID Students.

A further evaluation of grade point averages at graduation lead the researcher to compare average class rank at graduation of AVID students to the average class rank at graduation of non-AVID students. Class rank is directly affected by the student's grade point average. The closer a student is to ranking number one in their graduating class indicates the student earned a higher grade point average than their peers. The evaluation of class rank furthered the researcher's evaluation of AVID students' grade point average compared to their non-AVID peers.

Table 5 depicts the average class rank of the AVID and non-AVID student groups. The average class rank of AVID students was number 277 in the graduating class. The average class rank of non-AVID students was number 322 in the graduating class. When comparing the AVID students' class rank to the non-AVID students' class rank, the AVID students were ranked closer to number one than non-AVID students. This is reflective of AVID students' higher median grade point average compared to non-AVID students.

Average Class Rank

Table 5

AVID Participation	Average Class Rank
AVID	277
Non-AVID	322

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID Students.

The evaluation of AVID students' grade point average compared to non-AVID students' grade point average supports research conducted by Watt (2003) and Franklin (2011) that suggests AVID students outperform their non-AVID peers when enrolled in an AVID program for three or more years. The AVID students in this study maintained four years of enrollment in the AVID program. The AVID students' higher average grade point average at graduation allowed for a more desirable class rank at graduation compared to non-AVID students. AVID students had one student from the studied group in the top 10 graduates of their campus compared to zero non-AVID students graduating in the top 10 students supports research findings by Watt (2003) and Franklin (2011).

The AVID students' higher average class rank also supports research findings by Watt (2003) and Franklin (2011).

Research Question Four:

Do AVID students earn more college credits through the Advanced Placement program than non-AVID students?

The researcher studied the number of earned college credit through the Advanced Placement program of AVID students compared to non-AVID for the 2009-2010 and 2010-2011 school years. There were 100 AVID students that maintained four years of

enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

Before comparing college credit earned, it is important to assess Advanced Placement course enrollment. While students do not have to be enrolled in an Advanced Placement course to take an Advanced Placement exam for college credit, this is the most preferred method among students and teachers. To lay the groundwork for findings in this question, the researcher first compared Advanced Placement course enrollment for the 2009-2010 and the 2010-2011 school years.

During the 2009-2010 school year, AVID students were enrolled in 90 Advanced Placement courses. Seventy-four AVID students enrolled in one or more Advanced Placement courses. Forty non-AVID students enrolled in one or more Advanced Placement courses during the 2009-2010 school year. Forty-three AVID students enrolled in one or more Advanced Placement courses during the 2010-2011 school year. This enrollment number was a decline from the previous year. The enrollment was only 58.11% of previous enrollment in Advanced Placement courses by AVID students. The 43 AVID students enrolled in Advanced Placement courses in 2010-2011 took 63 classes. The number of Advanced Placement courses taken by AVID students also declined but only by 30.00%. The number of non-AVID students taking an Advanced Placement

course also declined in 2010-2011 to 32 students, a 20% decline in enrollment. The number of Advanced Placement course taken by non-AVID students remained the same at 55 for both years studied.

When comparing Advanced Placement course enrollment among AVID students and non-AVID students, AVID student enrollment had a decline while non-AVID student enrollment remained the same. The AVID student group had a higher student enrollment in Advanced Placement courses for both years when compared to the non-AVID student group. Table 6 depicts the comparison of the total number of AVID and non-AVID students enrolled in one or more Advanced Placement courses for the 2009-2010 and the 2010-2011 school years.

Table 6

Comparison of Percentage of Students Taking One or More Advanced Placement

Courses

	AVID		Non-AVID		
	Number of		Number of		
	Students	Students			
Year	Enrolled	Percent	Enrolled	Percent	
2009-2010	74	80.43%	40	43.48%	
2010-2011	43	46.74%	32	34.78%	

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID students.

Table 7 depicts the comparison of the total number of Advanced Placement courses taken for AVID and non-AVID students during the 2009-2010 and 2010-2011 school years.

Table 7

Comparison of Number of Advanced Placement Courses Taken During 2009-2010 and 2010-2011

	AVID	Non-AVID
	Number of	Number of
Year	Courses Taken	Courses Taken
2009-2010	90	55
2010-2011	63	55

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ AVID students

In order to be eligible to receive college credit based on an Advanced Placement exam, a student must earn a score of three or higher. Scores are administered on a scale basis and range from one to five. A student taking an Advanced Placement exam is not completely representative of enrollment in an Advanced Placement course. However, it is likely that the student taking the exam was enrolled in the Advanced Placement course for which the test was administered.

During the 2009-2010 school year, AVID students took a total of 47 Advanced Placement exams. Seven of the 47 exams administered to students earned a score of three or higher. These seven scores of three or higher were eligible for college credit at the post-secondary institution that the student who earned the score planned to attend. Of the 47 exams administered to the AVID students during the 2009-2010 school year, 14.89% of exams administered resulted in college credit.

During the 2009-2010 school year, non-AVID students took a total of 24 Advanced Placement exams. Nine of the 24 exams administered to non-AVID students

earned a score of three or higher. The nine scores of three or higher were eligible for college credit at the post-secondary institution that the student who earned the score planned to attend. Of the 24 exams administered to the non-AVID students during the 2009-2010 school year, 37.50% of exams resulted in college credit.

During the 2010-2011 school year, AVID students took zero Advanced Placement exams. Given that AVID students took zero Advanced Placement exams, there were no college credits earned through Advanced Placement exams during the 2010-2011 school year by AVID students. This was a decline by 100% compared to the number of Advanced Placement exams administered to AVID students in 2009-2010 and also a decline of 100% in earned college credit.

Non-AVID students took a total of four Advanced Placement exams in the 2010-2011 school year. This was a decline of 83.33% exams administered when compared to the 2009-2010 school year. Two of the four exams administered resulted in a score of three or higher; 50% of exams administered resulted in earned college credits. The number of college credits earned through Advanced Placement exams by non-AVID students decreased by 77.78% when compared to 2009-2010.

When comparing AVID students to non-AVID students' Advanced Placement exam taking patterns, AVID students took more Advanced Placement exams than non-AVID students during the 2009-2010 school year. The number of Advanced Placement exams taken by AVID students was 2.96 times greater than non-AVID students. However, non-AVID students earned more college credits than AVID students from Advanced Placement exams. AVID students earned 1.29 times less college credit through Advanced Placement than their non-AVID peers.

The non-AVID students took more Advanced Placement exams than the AVID students in 2010-2011. During this time frame, AVID students did not take any Advanced Placement exams and earned no college credit. The non-AVID students earned college credits in two Advanced Placement courses. In comparing the total number of Advanced Placement exams taken by AVID students to non-AVID students from 2009-2011, AVID students took 19 more exams than non-AVID students. However, non-AVID students earned more college credit; a total of four more exams resulted in college credit for the non-AVID student group. Table 8 depicts a comparison of AVID students' Advanced Placement exam participation and the number of college credits earned compared to non-AVID students.

Comparison of Advanced Placement Exams and College Credit Earned

	AV	ID	Non-AVID		
Year	Number of Tests Administered	Number of College Credits Earned	Number of Tests Administered	Number of College Credits Earned	
2009-2010	47	7	24	9	
2010-2011	0	0	4	2	

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ AVID students

Table 8

The evaluation of AVID students' Advanced Placement course enrollment compared to non-AVID students' course enrollment is consistent with Watt's (2006) research findings. The number of AVID students enrolled in Advanced Placement courses was greater than the number of non-AVID students enrolled in Advanced Placement courses. This was consistent for both years studied. Also, AVID students took a greater number of Advanced Placement exams than non-AVID students over the

years studied. However, AVID students earned less college credit through Advanced Placement exams than non-AVID students. It is important to note that during the 2010-2011 school year, AVID students took zero advanced placement exams while non-AVID students took four Advanced Placement exams.

Research Question Five:

Do AVID students earn more college credit through the Dual Credit program than non-AVID students?

The researcher studied the number of college credits that AVID students earned through the Dual Credit program compared to non-AVID students for the 2009-2010 and 2010-2011 school years. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

In order to assess college credit earned through Dual Credit classes, it is important to know the student enrollment. To lay the foundation for the evaluation of credits earned through Dual Credit courses, the researcher first compared the enrollment in Dual Credit courses between AVID and non-AVID students. Table 9 depicts the 2009-2010 and the 2010-2011 student enrollment in Dual Credit courses for AVID and non-AVID students.

During the 2009-2010 school year, there were 44 AVID students enrolled in Dual Credit courses. In the 2009-2010 school year, eight non-AVID students were enrolled in Dual Credit courses, 81.81% less than AVID students. For the 2010-2011 school year, 50 AVID students were enrolled in one or more Dual Credit courses, a 6.52% increase from 2009-2010. In comparison, 25 non-AVID students were enrolled in a Dual Credit course, 50% less than AVID students for the 2010-2011 school year.

Each year, the AVID and non-AVID groups had enrollment increases in Dual Credit courses. In 2010-2011, the AVID student Dual Credit course enrollment increased by 6.52%, and the non-AVID students increased their enrollment by 18.47%. In both years, there were more AVID students enrolled in Dual Credit courses than non-AVID students, 36 more students in 2009-2010 and 25 more students in 2010-2011. Table 9 depicts Dual Credit enrollment.

Table 9

Comparison of Percentage of Students Taking One or More Dual Credit Courses

	AVID		Non-AVID
-	Students		Students
Year	Enrolled	Percent	Enrolled Percent
2009-2010	44	47.83%	8 8.70%
2010-2011	50	54.35%	25 27.17%

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID students.

Students earn college credit in a Dual Credit course by receiving a passing grade in the course that meets the requirements of the college campus offering the Dual Credit course. This grade and credits/hours are recorded on the students' high school and

college transcripts. For this study, the minimum passing grade for a Dual Credit course was 70. When a student earned 70 or higher, three college credit hours were earned. All Dual Credit courses in Standard ISD were three credit hour courses at the college level.

During the 2009-2010 school year, AVID students enrolled in 115 Dual Credit courses, a potential of 345 credit hours. There were 105 Dual Credit courses that resulted in college credit earned, 315 credit hours earned for AVID students. Over ninety percent (91.30%) of courses taken by AVID students resulted in earned college credit hours. In 2009-2010, non-AVID students enrolled in 78 Dual Credit courses, a potential for 234 credit hours. Of the 78 Dual Credit courses taken, 78 resulted in earned college credit. Non-AVID students earned 234 credit hours. One hundred percent of the Dual Credit courses taken by non-AVID students in 2009-2010 resulted in earned college credit.

For the 2010-2011 school year, AVID students enrolled in 31 Dual Credit courses, a potential for 93 earned college hours. All of the Dual Credit courses taken by AVID students resulted in earned college credit, for a total of 93 college credit hours earned. In 2010-2011, non-AVID students enrolled in 41 Dual Credit courses, a potential of 123 college credit hours. Forty of the Dual Credit courses taken resulted in earned college credit for a total of 123 credit hours earned. Over ninety-five percent (97.56%) of the Dual Credit courses taken by non-AVID students in 2010-2011 resulted in earned college credit.

When comparing AVID students to non-AVID students' total Dual Credit enrollment patterns, AVID students enrolled in a total of 146 Dual Credit courses and non-AVID students enrolled in a total of 119 Dual Credit courses. AVID students enrolled in 27 more Dual Credit courses, a rate of 1.22 times greater than non-AVID

students. AVID students had the potential to earn 81 more college credit hours than non-AVID students. AVID students earned college credit hours in 136 Dual Credit courses compared to 118 courses that resulted in earned college credit for non-AVID students. AVID students earned a total of 408 earned college credit hours. Non-AVID students earned a total of 354 college credit hours. AVID students had 18 more courses that resulted in college credit than non-AVID students, 54 more college credit hours. AVID students took courses that resulted in earned college credit 1.15 times more that of non-AVID students. Table 10 depicts a comparison of AVID students' Dual Credit course enrollment and earned college credit compared to non-AVID students.

Table 10

Comparison of Dual Credit Course Enrollment and College Credit Earned

_	AV	TID	Non-AVID		
Year	Number of Dual Credit Courses	Number of College Credit Hours Earned	Number of Dual Credit Courses	Number of College Credit Hours Earned	
2009-2010	115	315	78	234	
2010-2011	31	93	41	120	

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ AVID students

The evaluation of AVID students' Dual Credit course enrollment compared to non-AVID students' course enrollment is consistent with Watt's (2006) research findings. The total number of AVID students enrolled in Dual Credit courses was greater than the total number of non-AVID students enrolled in Dual Credit courses. AVID students had more Dual Credit courses that resulted in earned college credit hours in comparison to non-AVID students. However, during the 2010-2011 school year, non-AVID students were enrolled in more Dual Credit courses than non-AVID students, thus

more non-AVID students earned college credit hours for the 2010-2011 school year when compared to AVID students. Even though AVID students earned more college credit through the Dual Credit program, the non-AVID students had a greater percentage of the Dual Credit courses that they enrolled in result in college credit. Non-AVID students earned 99.16% of the potential college credit available through the Dual Credit program based on the number of enrolled courses, and AVID students earned 93.15% of the potential college credit available through the Dual Credit program based on the number of enrolled courses.

Research Question 6:

Do AVID students have higher graduation rates than non-AVID students?

The researcher studied the comparison of graduation rates between AVID students and non-AVID students in 2011. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

In order to evaluate the graduation rates of AVID students compared to non-AVID students, it is important to understand the assessment requirements that students who graduated in the class of 2011 were required to meet prior to being eligible for graduation. In accordance with NCLB and the ESEA, the state of Texas mandated that

students meet the passing standard on all four subjects of the Exit Level TAKS. The researcher first compared the number of students who met the passing standard on the Exit Level TAKS between AVID and non-AVID students.

The graduating class of 2011 was administered the Exit Level TAKS for the first time in the spring of 2010. Students were eligible to take the Exit Level TAKS test when they meet the passing requirements for graduation. For the purpose of this study, students' test scores on the initial administration were evaluated.

For the initial administration of the Exit Level TAKS, the entire group of 92 AVID students participated in testing for each of the four tests administered. The non-AVID students had the entire group of 92 students participate in three of the four subject areas administered. In the English language arts test, only 91 non-AVID students participated in the initial administration.

Table 11 depicts the comparison of passing percentages for the spring 2010 administration of the Exit Level TAKS between AVID and non-AVID students.

AVID students had a 100% passing percentage on three of the four tests administered, the science assessment being the exception. There was a 98.91% passing rate for the non-AVID students on the Exit Level English language arts TAKS compared to the 100% passing rate of AVID students. Because only 91 of the 92 non-AVID students participated in the English language arts assessment, one student was documented as not passing. When evaluating the Exit Level math TAKS test, 95.57% of the non-AVID students met the passing requirement in comparison to the 100% passing rate of the AVID students. There were five non-AVID students who did not meet the passing requirement for the Exit Level math TAKS.

Two of the 92 non-AVID students did not meet the passing standard for the Exit Level science TAKS, a passing rate of 97.83%. The non-AVID student group's passing rate was slightly higher than the AVID student group, as three students did not meet the passing standard on the Exit Level science TAKS, resulting in a passing rate of 96.74%. Both the AVID students and the non-AVID students had a 100% passing rate on the initial administration of the Exit Level social studies TAKS.

Table 11

Comparison of AVID Students and Non-AVID Students Meeting Passing Standard on

Spring 2010 Exit Level TAKS

	AVID			Non-AVID		
		Number	Percent	Number Percent		
Test	Number	Met	Met	Number Met Met		
Subject	Tested	Standard	Standard	Tested Standard Standard		
ELA	92	92	100.00%	91 91 98.91%		
Math	92	92	100.00%	92 87 94.57%		
Science	92	89	96.74%	92 90 97.83%		
Social						
Studies	92	92	100.00%	92 92 100.00%		

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID students.

Overall, the AVID students participated in the initial administration of the Exit Level TAKS at a higher percentage than non-AVID students. The AVID students also met the passing standard for the Exit Level TAKS more often than non-AVID students. The AVID students outperformed the non-AVID students on the Exit Level English

language arts and math TAKS. The AVID students and non-AVID students both had a 100% passing rate on the social studies Exit Level TAKS. The non-AVID students outperformed the AVID students on the Exit Level science TAKS.

To delve deeper into the Exit Level TAKS passing standards, the researcher evaluated the percentage of students that received Commended status on the Exit Level TAKS. Because a Commended score on the Exit Level TAKS was a factor evaluated by colleges to indicate college readiness at graduation, it is important to evaluate the AVID student performance in the data of Commended status.

Table 12 depicts the comparison of Commended score percentages for the spring 2010 administration of the Exit Level TAKS between AVID and non-AVID students. In the evaluation of the Exit Level English language arts TAKS, 22.83% of AVID students received a Commended score. The non-AVID students outperformed the AVID students in comparison of Commended scores on the Exit level English language arts TAKS. Twenty-nine non-AVID students, 31.52%, received a Commended score on the Exit Level English language arts TAKS.

The non-AVID students outperformed the AVID students in Commended scores on the Exit Level math TAKS. There were 26.09% of the non-AVID students who scored Commended on the Exit Level math TAKS in comparison to 19.57% of the AVID group. There were six more non-AVID students who earned a Commended score on the Exit Level math TAKS than the AVID students.

The Exit Level science TAKS Commended score percentage was the only occurrence in which the AVID students outperformed the non-AVID students. There was one more student in the AVID student group that scored Commended on the Exit

Level science TAKS compared to the non-AVID student group. The AVID students had a 13.04% Commended scoring percentage compared to the 11.96% Commended scoring percentage of the non-AVID students on the Exit Level science TAKS.

The non-AVID student group had a higher Commended scoring percentage on the Exit Level social studies TAKS in comparison to the AVID students. There were 45 non-AVID students that received a Commended score on the Exit Level social studies TAKS in comparison to 37 non-AVID students, a difference of eight students. The non-AVID students had a 48.91% Commended scoring percentage compared to 40.22% of AVID students.

Table 12

Comparison of AVID Students and Non-AVID Students Passing with Commended on Spring 2010 Exit Level TAKS

	AVID			Non-AVID		
-						
Test	Number	Number of	Percent	Number	Number of	Percent
Subject	Tested	Commended	Commended	Tested	Commended	Commended
ELA	92	21	22.83%	91	29	31.52%
Math	92	18	19.57%	92	24	26.09%
Science	92	12	13.04%	92	11	11.96%
Social						
Studies	92	37	40.22%	92	45	48.91%

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID students.

Overall, the non-AVID students outperformed their AVID peers when evaluating the Commended scoring percentage of the Exit Level TAKS. The AVID students outperformed the non-AVID students in Commended scoring on the Exit Level science TAKS. The non-AVID students outperformed the AVID students in the Commended scoring of Exit Level English language arts, math, and social studies TAKS.

In addition to the testing requirements for graduation, students were required to earn a minimum number of credits to be eligible for graduation in accordance with state guidelines. The researcher evaluated the graduation percentages of the AVID student group and the non-AVID student group to determine the graduation rates for both groups. For the purpose of this study, two graduation dates were evaluated. The studied district offered two graduation dates to students in order to accommodate those students that did not meet the initial graduation date. In order to be considered a graduate as part of the cohort for state reporting, a student must graduate prior to the start of the following school year.

In comparing the AVID student group to the non-AVID student group, the AVID students had a higher graduation rate than the non-AVID students. The AVID student group had 92 of the 92 students graduate in June of 2011. The non-AVID student group had 86 of the 92 students graduate in June of 2011. One hundred percent of the AVID students studied graduated as part of the four-year cohort compared to 93.48% of the non-AVID matched-paired group.

In the studied district, students could participate in an August graduation.

Because 100% of the AVID students met the graduation requirements for the June 2011 graduation, there were no students for the AVID group graduating in August. The non-

AVID student group had four of the six students who did not meet graduation requirements in June participate in the August graduation. Table 13 depicts the number of graduates and percentage of graduates for AVID students and the non-AVID student group.

Table 13

Comparison of AVID Students and Non-AVID Students Percentage of Graduates Based on Graduation Date

	AVID			Non-AVID		
	N. 1 . 0	D			D	
Graduation	Number of	Percent of	ľ	Number of	Percent of	
Date	Graduates	Graduates	(Graduates	Graduates	
June 2011	92	100.00%		86	93.48%	
August 2011	0	0.00%		4	4.35%	
Total	92	100.00%		90	97.83%	

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID Students

Overall, the AVID students had a higher graduation rate than the non-AVID students. One hundred percent of the AVID students graduated after completing four years of high school. The non-AVID group only had 97.83% of students complete high school in four years.

To further compare the AVID students to the non-AVID students, the researcher evaluated the graduation program endorsement that the students received at graduation. This gives further clarity into college readiness of AVID students. As explained in Chapter Three, the most prestigious and most rigorous graduation program was the Distinguished Achievement Program endorsement.

The Recommended High School Program was the baseline program for college readiness among graduates in the class of 2011 in Standard ISD. For the class of 2011 AVID graduates, the largest percentage of AVID and non-AVID graduates earned a Recommended High School Program diploma. There were 82.61% of AVID students that earned this type of diploma. The non-AVID student group had 71 students earn a Recommended High School Program diploma, 77.17%.

There were 10 AVID students who graduated as part of the Distinguished Achievement Program, 10.87% of the AVID student group. The non-AVID student group had three students graduate as part of the Distinguished Achievement Program, 3.26%. The AVID students had a higher percentage of graduates under the most rigorous graduation program.

The graduation program that required students to earn the least amount of credits was the Minimum High School Program. There were six graduates from the AVID group of students that graduated under the Minimum High School Program, 6.52%. The non-AVID student group had 16 graduates that graduated as part of the Minimum High School Program, 17.39%. Table 14 depicts the comparison of graduation program endorsements between AVID students and the non-AVID student groups.

Table 14

Comparison of AVID Students and Non-AVID Students Graduation Program

Endorsements

	AVID		Non-AVI	Non-AVID		
Graduation	Number of	Percent of	Number of	Percent of		
Plan	Graduates	Graduates	Graduates	Graduates		
Minimum	6	6.52%	16	17.39%		
Recommended	76	82.61%	71	77.17%		
Distinguished	10	10.87%	3	3.26%		

Note. ${}^{a}n=92$ AVID students. ${}^{b}n=92$ Non-AVID students.

In evaluating the AVID student group compared to the non-AVID student group, the AVID students had a higher number of students graduating with a more prestigious graduation program endorsement. A larger number of AVID students graduated as part of the Recommended High School Program and the Distinguished Achievement Program. There was a total of 93.48% of AVID graduates that graduated as part of the Distinguished Achievement or the Recommended High School graduation program. Only 80.43% of the non-AVID student group graduated as part of the Distinguished Achievement or the Recommended High School Program.

Overall, the AVID students performed slightly better on the initial administration of the Exit Level TAKS. The non-AVID students outperformed the AVID students on Commended scoring of the Exit Level TAKS, except for the science test. AVID students had a higher percentage of graduates with a more rigorous and prestigious program of graduation endorsement.

Summary

The evaluation of the AVID program, through the comparison of AVID students to non-AVID students, presented mixed results. The AVID students had slightly higher average daily attendance rates than the matched-paired, non-AVID student group. AVID students received less than half the number of disciplinary referrals than the matched-paired, non-AVID student group for each year studied. AVID students had a slightly better median grade point average than the matched-paired, non-AVID group of students, leading them to a more academically desirable class rank. AVID students took a greater number of Advanced Placement courses and a greater number of Advanced Placement exams than the matched-paired, non-AVID student group. However, the matched-paired, non-AVID student group earned more college credit than AVID students based on Advanced Placement Exam scores.

AVID students enrolled in more Dual Credit courses than the matched-paired, non-AVID student group, and overall earned more college credit hours through the Dual Credit program than the matched-paired, non-AVID student group. AVID students outperformed the matched-paired, non-AVID students on three of the four Exit Level TAKS subject areas that were tested. The matched-paired, non-AVID student group outperformed the AVID students on the Exit Level science TAKS and had a greater percentage of students earning a Commended score on three of the four Exit Level TAKS subject areas tested when compared to AVID students. The AVID students had a higher graduation rate, and more students earned a Recommended High School Program or Distinguished Achievement Program graduation program endorsement.

CHAPTER FIVE

DISCUSSION

The purpose of this study was to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. This study compared AVID students who maintained four-year enrollment in the AVID program to students who were enrolled in Standard ISD for four years but not enrolled in the AVID program. The researcher evaluated the AVID program to determine the success of meeting its program goals. Measures of success were student: (1) daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

This final chapter reviews the evaluation and the analysis of educational achievement of the AVID program of Standard ISD. This final chapter discusses the outcomes of the study. The chapter concludes by addressing the limitations of the study and presents a review of implications for practice and future research.

Review of Theoretical Framework

This study was designed to analyze the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. Following the CIPP Model of Evaluation, the study compared AVID students who maintained four-year enrollment in the AVID program to non-AVID students. The CIPP Model for Evaluation allowed for an objective and systematic approach to the evaluation.

The context, input, process and program evaluands within the CIPP Model allow for independent and interdependent analysis of program consideration, implementation, processes, and outcomes. This study addressed the outcome or product of the AVID program in order to determine if academic achievement measures were met.

Summary of the Study

This study evaluated the AVID program of a midsized Gulf Coast school district by comparing students who were enrolled in the AVID program from 2007-2011 to students who were never enrolled in AVID. The district's Data, Research and Evaluation Officer provided the students' demographic and academic achievement data that were studied to the researcher. All personal identification of participants was removed prior the researcher receiving the data.

The data were disaggregated by students who had participated in the AVID program for four years and by students who had not. The AVID students were then matched-paired to the non-AVID students by campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The matched-paired students were then compared to determine the academic achievement of AVID students.

Descriptive statistics were used to present the percentages and frequencies that emerged from the comparison of the AVID students to non-AVID students' academic achievements during the 2007-2011 school years. The first measure of academic achievement was average daily attendance of AVID students compared to the non-AVID student group from 2007-2011. The accrued disciplinary referrals from 2007-2011 of AVID students were then compared to those of the non-AVID student group during the

same time frame. AVID students' grade point average and class rank at graduation were evaluated and compared to the non-AVID student group's grade point average and class rank at graduation. AVID students' Advanced Placement course enrollment and Advanced Placement exam participation were evaluated in comparison to the non-AVID student group for each group's junior and senior year of high school to determine the number of college credits earned through the Advanced Placement program. The researcher evaluated the Dual Credit course enrollment and the number of college credits earned by the AVID students in comparison to the course enrollment and number of college credits earned by the non-AVID student group through the Dual Credit program. Finally, the graduation rate of the AVID students was compared to the non-AVID student group through measures of Exit Level TAKS passing percentage and Commended status, graduation program endorsement, and cohort completion.

Review of Methodology

This study was designed to present an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. Educational achievement was measured by: (1) daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs. The archival data obtained for analysis of these educational achievement measures were received from district's Data, Research and Evaluation Officer in the Research, Accountability and Data department. The archival data received followed the 2007-2008, 2008-2009, 2009-2010, and the 2010-2011 school years.

The study was conducted in a midsized suburban school district located north of a major metropolitan area in the Gulf Coast region of Southeast Texas. The four high schools within the district studied maintained an AVID program from 2007 until 2011. The archival data received by the researcher included all students who began high school in the fall of 2007 and continued enrollment in the district through the 2011 school year. There were 100 students of the overall student group who maintained four-year enrollment in the AVID program in the studied district from 2007-2011. There were 2,027 students who were not enrolled in AVID but maintained enrollment in Standard ISD for the four years from 2007-2011. The researcher matched the AVID students to non-AVID students randomly by using the following factors: campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting group studied was 92 AVID students matched-paired to 92 non-AVID students.

Following the theoretical framework of the product evaluand of the CIPP

Evaluation Model, the study compared the educational outcomes of AVID students

compared to matched-paired, non-AVID students. The archival data were disaggregated

by student group then analyzed and evaluated to determine the successfulness of the

AVID program in increasing the educational achievement of AVID students in

comparison to the matched-paired, non-AVID students. Descriptive statistics were used

to convey and compare percentages and frequencies that were present in the AVID

student group and the matched-paired, non-AVID student group's academic

achievements. The analysis and evaluation of educational achievement focused on the

overarching question of the CIPP Model of Evaluation's product evaluation,

"Did the project succeed?" (Zhang, 2011, p. 66).

Discussion of Findings

The researcher sought to analyze the educational achievement of the AVID program through a program evaluation of the AVID program in a midsized Gulf Coast school district. The following research questions were addressed in this study:

- 1. Do AVID students have higher average daily attendance than non-AVID students?
- 2. Do AVID students receive less disciplinary referrals than non-AVID students?
- 3. Do AVID students earn higher grade point averages than non-AVID students?
- 4. Do AVID students earn more college credits through the Advanced Placement program than non-AVID students?
- 5. Do AVID students earn more college credit through the Dual Credit program than non-AVID students?
- 6. Do AVID students have higher graduation rates than non-AVID students?

Review of Evaluation Findings

The researcher studied the comparison of AVID students and the non-AVID student group through: (1) daily attendance; (2) disciplinary referrals; (3) grade point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs. There were 100 AVID students that maintained four years of enrollment in AVID from 2007-2011. There were 2,027 students that maintained enrollment in Standard ISD from 2007-2011 that were never

enrolled in AVID. The AVID students in Standard ISD were matched-paired to non-AVID students in Standard ISD based on campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting number of matched-paired students was 92 AVID students and 92 non-AVID students.

The average daily attendance of the AVID students was compared to the matched-paired, non-AVID students for the 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years. AVID students were found to have a better average daily attendance rate when compared to the matched-paired, non-AVID student group for their freshman and senior years of high school. However, for their sophomore and junior years, the AVID and the matched-paired, non-AVID student group's average daily attendance was the same. These findings were consistent with the findings of Watt et al., (2006) where AVID students were shown to have greater attendance in comparison to non-AVID students. However, the findings did not support Watt, Powell, and Mendiola's (2004) findings in which AVID students were found to have attendance rates 5% greater than non-AVID students.

The number of AVID students receiving referrals was compared to the number of matched-paired, non-AVID students receiving referrals for the 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years. The number of disciplinary referrals received by AVID students was compared to the number of disciplinary referrals received by the matched-paired, non-AVID student group for the 2007-2008, 2008-2009, 2009-2010, and 2010-2011 school years. The number of AVID students receiving referrals each year was considerably less than the number of matched-paired, non-AVID students. Non-AVID

students received referrals at a rate of 2.5 times more per year than AVID students for each year except for 2010-2011. In 2010-2011, non-AVID student group earned more than two times the number of referrals than the AVID students, slightly less than the previous three years. The number of referrals received by the AVID student group was more than two times less that of the matched-paired, non-AVID student group each year studied. These results were consistent with Cox's findings (2008) in which AVID students were found to have more than 50% less referrals than their non-AVID peers.

The median grade point average of the AVID students was compared to the median grade point average of the matched-paired, non-AVID student group. The AVID student group's and the matched-paired, non-AVID student group's median grade point averages were calculated by averaging each group's grade point averages at graduation. The AVID students, in comparison to the matched-paired, non-AVID students, had a higher median grade point average. These results were found to be consistent with findings by Watt (2003), Whitaker (2005), and Franklin (2011) in which AVID students were found to outperform their non-AVID peers academically. The higher grade point average contributed to AVID students having a more desirable class rank. The AVID student group had one student who was ranked in the top ten students in their graduating class while the matched-paired, non-AVID student group had none.

The enrollment in Advanced Placement courses by AVID students was compared to the enrollment in Advanced Placement courses by the matched-paired, non-AVID student group. AVID students enrolled in more Advanced Placement courses than the matched-paired, non-AVID student group. Advanced Placement course enrollment was studied for the 2009-2010 and the 2010-2011 school years. For both years studied, AVID

Placement enrolled in a greater number of Advanced Placement courses. The Advanced Placement enrollment patterns of AVID students compared to non-AVID students are consistent with findings by Watt (2006) and Whitaker (2005) in which AVID students were found to enroll in Advanced Placement courses at a higher rate than non-AVID students. The number of Advanced Placement exams taken by AVID students was compared to the number of Advanced Placement exams taken by the matched-paired, non-AVID student group for the 2009-2010 and 2010-2011 school years. AVID students participated in a greater number of Advanced Placement exams than the matched-paired, non-AVID student group. The matched-paired, non-AVID students earned more college credits through Advanced Placement examinations than the AVID students.

Interestingly, even though AVID students participated in more Advanced Placement exams during the combined junior and senior years, during their senior year, the AVID student group did not participate in Advanced Placement testing.

The Dual Credit enrollment of AVID students was compared to the Dual Credit enrollment of the matched-paired, non-AVID student group for the 2009-2010 and 2010-2011 school years. In evaluation of AVID student enrollment in Dual Credit courses compared to the matched-paired, non-AVID student group, AVID students enrolled in more Dual Credit courses than the non-AVID student group. These results were consistent with findings by Watt (2006) in which AVID student enrollment in Advanced Placement courses was more than non-AVID students. Over the two years studied (2009-2011), more AVID students enrolled in Dual Credit courses, but when looking at 2010-2011, more students from the matched-paired, non-AVID student group enrolled in Dual Credit courses. The number of college credit hours earned through the Dual Credit

program by AVID students was compared to the number of college credit hours earned by the matched-paired, non-AVID student group in the 2009-2010 and 2010-2011 school years. AVID students, compared to the matched-paired, non-AVID student group, earned more college credits through the Dual Credit program.

The graduation rate of the AVID students was compared to the graduation rate of the matched-paired, non-AVID student group. The AVID students had a higher graduation rate than the matched-paired, non-AVID student group. As the researcher assessed the graduation rates of AVID students compared to the matched-paired, non-AVID students, factors such as Exit Level TAKS passing rate and graduation program endorsements were considered. The AVID students outperformed the matched-paired, non-AVID student group on the initial administration of the Exit Level TAKS test. However, the matched-paired, non-AVID student group had a greater percentage of students earning Commended scores on three of the four assessments of the Exit Level TAKS. The AVID students had more students graduate as part of the Recommended High School Program and Distinguished Achievement Program compared to the matched-paired, non-AVID student group.

Study Limitations

This study was limited by the single cohort of students evaluated as part of the AVID program in a midsized school district with four high school campuses. There were 100 students who maintained four-year enrollment in the AVID program throughout the district from 2007-2011. There were 2,027 students who maintained enrollment in Standard ISD for the four years from 2007-2011. In order to create a like group of non-AVID students to compare to AVID students, the researcher matched the AVID students

to non-AVID students randomly by using the following factors: campus of enrollment, gender, ethnicity, At Risk status, Economically Disadvantaged status, Limited English Proficiency status, and Special Education status. The resulting group was 92 students. Eight AVID students were removed from the AVID group because there was no exact match.

The AVID selection process was dictated by AVID and the studied district. However, each campus' AVID teacher, counselor, coordinator and selected site team members were responsible for carrying out the selection process. Human error and preference may have played a factor in selection; therefore, they may have created inconsistencies in the selection process.

Each of the four campuses within Standard ISD maintained an AVID program.

However, each campus had a different number of students enrolled in the program.

There were disparities in enrollment where one campus had a much larger number of students accepted into the AVID program and maintained enrollment in comparison to a much smaller number of enrollment among the other three campuses. The three campuses with less AVID enrollment also had more attrition over the studied time frame.

All four campuses had a dedicated AVID teacher that was trained by AVID prior to program implementation. There were no set criteria for selection of the AVID teacher; therefore, each teacher may have come from a different curriculum foundation and had previously ingrained teaching practices that may have served their AVID students differently than other campuses. The same is true for the AVID counselor, AVID coordinator, and AVID site team at each of the four campuses. This study did not account for AVID teachers, counselors, and coordinators that changed through the four

years evaluated.

The demographic enrollment in the AVID program differed from the enrollment of the district. There were more students who were classified as Economically Disadvantaged and At Risk in AVID than in the non-AVID group. Students of Hispanic, African American, and Asian/Pacific Islander origin were overrepresented in the AVID group in comparison to the district's enrollment. Students of White origin were underrepresented in the AVID group in comparison to the district's enrollment as a whole.

The attendance data reported and collected by the district for the purposes of this study were delivered as the number of days that students missed and therefore lent itself to the study of average daily attendance. A more reflective way of reporting student attendance would be the evaluation of student absences by class period. This would allow the analysis of student attendance on a more granular level (Muñoz, 2012).

This study could not limit the amount of tutoring or assistance that AVID students may have given their non-AVID peers. Nor could the study account for variances in student learning rates, parental support, or participation in instructional programs aimed at increasing student achievement that students may have been exposed to. Finally, much of the literature presented relating to AVID is not located in refereed journals. Many of the studies are presented by the National AVID Center, thus creating the potential for bias.

Implications for Educational Practice

Through the analysis and evaluation of the educational achievements of AVID students, this study provides information to various stakeholders regarding the

successfulness of the AVID program meeting its program goals. The study provides campuses and districts with an evaluation of student achievement data for those students who maintained four-year enrollment in the AVID program compared to matched-paired, non-AVID students. Following the CIPP Evaluation Model as the theoretical framework, instructional leaders and stakeholders are provided with contextual information as they may consider implementing the AVID program (Stufflebeam, 2000).

In addition to providing contextual information to districts considering implementing the AVID program, the process evaluation provides the studied district with material that can be beneficial in determining the "merit and worth" of the AVID program moving forward (Stufflebeam, 2000). This study provided an analysis of student achievement after four years of enrollment in the program. Interestingly, the students studied were in the inaugural cohort of AVID students for the studied district that matriculated in the fall semester of 2007.

From this study, the district can address potential changes in program implementation that need to be made, additional AVID training of faculty and staff, and assess financial resources dedicated to the implementation of the AVID program. A robust review of implementation of the AVID practices and procedures to ensure consistency with the national requirements should be considered. This process evaluation may bring to light outcomes of any inconsistencies in implementation that are present.

The studied district moving forward may evaluate the financial investment of implementing the AVID program based partly on the outcomes presented and be forced to consider making difficult decisions regarding continuation. While the study conveyed differences in student performance through percentages and frequencies present in

student achievement data, this alone should not be used in the determination of continuance or cessation. An evaluation helps decipher the positive and negative aspects that are occurring because of the program implementation and helps recognize the unintended and sometimes unwelcomed outcomes (Stufflebeam, 2000).

Implications for Future Research

Through the course of study, additional areas of research and evaluation were found. Since there are few studies of the AVID program that are not funded by AVID, additional studies analyzing the academic impact of the AVID program are needed. These recommendations for further study will provide more insight into the effectiveness of the AVID program as a method for closing the achievement gap. The researcher submits the following recommendations for future research:

- A study evaluating the educational achievements of students who were identified
 as being a candidate for the AVID program but chose not to follow through with
 acceptance compared to the educational achievements of students who followed
 through with acceptance and maintained four-year enrollment.
- 2. A longitudinal study of AVID students who maintained enrollment in the AVID program through college graduation. The researcher could evaluate and analyze the AVID students' self-reported Senior Data to measure their successfulness in obtaining the goals personally outlined.
- 3. A qualitative analysis of the AVID students' perceptions of the successfulness of the AVID program in making an impact on their educational careers.
- 4. Further evaluation of disciplinary infractions of AVID students in comparison to the severity of disciplinary infractions of non-AVID students or other student

- groups such as Economically Disadvantaged or At-Risk.
- An analysis of AVID and non-AVID students' PSAT, SAT, and ACT scores to determine any statistically significant differences that may occur in college entrance requirements.
- 6. A longitudinal study of AVID students in Standard ISD that maintained seven years of enrollment in the AVID program.
- 7. A comparison of AVID students from Standard ISD and another matched district to determine if the academic performance of AVID students in Standard ISD were similar to the academic performance of other AVID students.
- 8. A mixed methods study consisting of a qualitative study of faculty and staff's perceptions and use of the AVID program and a quantitative assessment of AVID students' academic achievements.
- An evaluation of the educational achievements of the AVID program using academic measurements of the State of Texas Assessment of Academic Readiness (STAAR).
- 10. A replication of this study in a different district.

Conclusion

This study presented an analysis of the educational achievement of the AVID program in a midsized Gulf Coast school district through program evaluation. The researcher evaluated the AVID program by comparing the educational achievement of AVID students who maintained four years of enrollment in the AVID program of Standard ISD to a matched-paired group of non-AVID students. The study measured educational achievement through (1) daily attendance; (2) disciplinary referrals; (3) grade

point averages; (4) Advanced Placement and Dual Credit course enrollment and completion; (5) college credit earned through Advanced Placement and Dual Credit courses; (6) Exit Level TAKS scores; and (7) graduation rates and programs.

Much of the research regarding the AVID program has been funded by the National AVID Center. This study contributes to unfunded research in analyzing and evaluating the educational achievement of the AVID program implemented in a midsized school district. Descriptive statistics were used to present percentages and frequencies that were observed between the comparison of AVID and non-AVID students. The program evaluation provided the researcher with evidence of AVID student achievement in comparison to the non-AVID student group. The researcher was able to determine if AVID students performed better academically than their matched-paired, non-AVID peers. The researcher was also presented with evidence of when the matched-paired, non-AVID students outperformed their AVID peers.

The key findings for this study are:

- AVID students were found to have a better average daily attendance
 rate when compared to the matched paired, non-AVID student group
 for their freshman and senior years of high school. However, for their
 sophomore and junior years, the AVID and the matched-paired, nonAVID student group's average daily attendance was the same.
- The number of AVID students receiving referrals each year was
 considerably less than the number of matched-paired, non-AVID
 students. Non-AVID students received referrals at a rate of more than
 2.5 times more per year than AVID students for each year except for

- 2010-2011. In 2010-2011, non-AVID students earned more than two times the number of referrals than AVID students, slightly less than the previous three years.
- AVID students, in comparison to the matched-paired, non-AVID students, had a higher median grade point average. The higher grade point average led to AVID students having a more desirable class rank.
 The AVID student group had one student who was ranked in the top 10 students in their graduating class while the matched-paired, non-AVID student group had none.
- AVID students enrolled in more Advanced Placement courses than the
 matched-paired, non-AVID student group. AVID students also
 participated in more Advanced Placement exams than the matchedpaired, non-AVID student group. The matched-paired, non-AVID
 students earned more college credit through Advanced Placement
 examinations than AVID students.
- AVID students enrolled in more Dual Credit courses than the non-AVID student group. AVID students earned more college credits through the Dual Credit program compared to the matched-paired, non-AVID student group. However, the matched-paired, non-AVID student group earned a greater percentage of college credits based on course enrollment.
- AVID students outperformed the matched-paired, non-AVID student group on the initial administration of the Exit Level TAKS test. The

matched-paired, non-AVID student group had a greater percentage of students earn Commended scores on three of the four assessments of the Exit Level TAKS. AVID students had a higher graduation rate than the matched-paired, non-AVID student group and had more students graduate as part of the Recommended High School Program and Distinguished Achievement Program.

This study found that the AVID program can make a difference in educational achievements of students identified as having academic potential. While many questions remain regarding the effectiveness of the AVID program's ability to close achievement gaps, this study shows the positive differences the AVID program makes for AVID students in comparison to matched-paired, non-AVID students. The analysis and presentation of student educational achievements, compiled through a program evaluation of AVID, shares insight into the variances of student academic performance with rigorous educational support. According to Stufflebeam (2000), an evaluation should be connected to program improvement and professional responsibility and is designed to promote program growth.

A program evaluation is a means by which educational leaders and staff can gather feedback and data to systematically identify and meet a menagerie of student needs and accountability requirements. This study sought to garner information regarding the ability of the AVID program to meet program goals and expectations within the studied district. The intent of this evaluation was to provide the acquired contextual information to decision makers of campuses and districts who may be interested in implementing the AVID program in the future.

References

- Adelman, C. (1998). *Answers in the toolbox*. Washington, DC: U.S. Department of Education.
- Annie E. Casey Foundation. (2011). 2011 Kids count data book.
- Apple, M.W. (1982). Education and power. Boston, MA. Routledge & Kegan Paul.
- Apple, M.W., & Weis, L. (1983). *Ideology and practice in education: A political and conceptual introduction*. Philadelphia, PA.: Temple University Press.
- Arellanas, S., Bishop, C., & Castruita, J. (2005). *AVID: Advancement Via Individual Determination Administrator Guide Grades 6-12*. San Diego: AVID Press.
- AVID Center (2006). *Implementing and managing the AVID program for middle level.*San Diego, California: AVID Press.
- AVID Center (2012a). AVID certification report and self study continuum. (2012-2013).

 Retrieved from http://www.static.kern.org/gems/AVID/20122013CSS.pdf
- AVID Center (2012b). Where is AVID? Retrieved from http://www.avid.org/where-is avid.html
- AVID Center (2013a). About AVID. Retrieved from http://www.avid.org/dl/resources/about avid.pdf
- AVID Center (2013b). AVID college readiness system: An overview. Retrieved from http://www.avid.org/dl/starting/avid_overview2013.pdf
- AVID Center (2013c). AVID secondary overview. Retrieved from http://www.avid. org/sec_overview.html#student
- AVID Center (2013d). AVID student recruitment packet. Retrieved from http://www.avid.org/dl/eve_natcon/nc12_creating_cultural_proficiency_handout.pdf

- AVID Center (2013e). Data and results: Completion of four year college entrance requirements. Retrieved from http://www.avid.org/data-and results.ashx#02
- AVID Center (2013f). WICOR: AVID's foundation for high engagement teaching & learning. Retrieved from http://www.avid.org/dl/hed/hed_reviewofliterature.pdf
- AVID Center (2015a). AVID's impact. Retrieved from http://www.avid.org/avid-impact.ashx
- AVID Center (2015b). Where is AVID? Retrieved from http://www.avid.org/where-is avid.ashx
- AVID Center (2015c). AVID senior data collection, 2010-11. [Electronic Database].
- AVID Center (2015d). *AVID Texas part II data collection*, 2007-08, 2008-09, 2009-10, 2010-11. [Electronic Database].
- AVID Center (2015e). AVID Mission Statement. Retrieved from http://www.avid.org
- AVID Center (n.d.-a). AVIDstory. Retrieved from http://archives.avid.org/avidstory.html
- AVID Center (n.d-b). Validation of the AVID certification self study (CSS): A measure of AVID secondary program implementation fidelity. Retrieved from http://www.avid.org/dl/res_research/research_validationoftheavidcss.pdf
- Balfanz, R., & Legters, N. (2006). Closing 'dropout factories': The graduation-rate crisis we know, and what can be done about it. Education Week, *25*(42), 42-43.
- Belfiore, P.J., & Hornyak, R.S. (1998). Operant theory and application to self monitoring in adolescents. In D.H. Schunk & B.J. Zimmerman, (Eds.) *Self regulated learning: From teaching to self reflective practice* (pp. 184-202). New York: The Guilford Press.

- Black, A., Little, C., McCoach, D., Purcell, J. & Siegle, D. (2008). Advancement via individual determination: Method selection in conclusion about program effectiveness. *The Journal of Education Research*, *102*, 111-123. Retrieved from http://iub.edu.pk/jer/Home.html
- Bogan, Y.K.H. & Porter, R.C. (2005). On the ball with higher-order thinking. *Teaching PreK-8*, *36*, 46-47. Retrieved from http://www.teachingk-8.com
- Bridgeland, J. M., Dilulio, J. J., & Morrsion, K. B. (2006). *The silent epidemic*.

 Civic Enterprises in association with Peter D, Hart Associates, Bill & Melinda Gates Foundation.
- Brooks, J.G. & Brooks, M.G. (1999). *In search of understanding: The case for constructivist classrooms*. Revised. Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from http://ascd.org
- Bruner, J. S. (1975). From communication to language: A psychological perspective. Cognition, *3*, 255–287.
- Bruner, J.S. (1960). *Process of education*. Cambridge, Massachusetts: Harvard University Press.
- Burris, C.C. & Welner, K. (2005). Closing the achievement gap by detracking. *Phi Delta Kappan*, 86(8), 594-598.
- Campbell, J., Hombo, C., & Masseo, J. (2000). *NAEP 1999 trends in academic progress: Three decades of student performance* (NCES Report No. 2000469). Washington, DC: National Center for Educational Statistics

- Cardenas, J. A., Montecel, M. R., Supik, J. D., & Harris, R.J. (1992). The Coca-Cola valued youth program. Dropout prevention strategies for at risk students. *Texas Researcher*, *3*, 111-130.
- Cazden, C.B., & Mehan, H. (1988). Principles from sociology and anthropology. In M.C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp. 47-59). Oxford, England: Pergamon.
- Columbia Public Schools (n.d.). WICOR Strategies [Online Image]. Retrieved July 7, 2015 from http://www.cpsk12.org/Page/10825
- Cooper, J., Horn, S., Strahan, D. (2005). "If only they would do their homework:"

 Promoting self-regulation in high school English classes. *The High School Journal*, 10-25.
- Cooper, J.E., Ponder, G., Merritt, S., & Matthews, C. (2005). High-performing high schools: Patterns of success. *NASSP Bulletin*, 89(645), 2-23.
- Conchas, G. & Rodriguez, L. (2008). Small schools and urban youth: Using the power of school culture to engage students. Thousand Oaks, CA: Corwin Press.
- Cota-Robles, E., & Gordon, E. (1999). Reaching the top: A report of the national task force on minority high achievement. New York: The College Board.
- Cox, H. (2008). The effect of a smaller learning community on students in a large high school. (Doctoral Dissertation, Baylor University). (Accession Order No. 3316054)

- Cunningham, A., Redmond, C., Merisotis, J., (2003). Investing early: Intervention programs in selected U.S. states. Canada Millennium Scholarship Foundation, Montreal, Canada. Institute for Higher Education Policy. Retrieved from http://www.millenniumscholarships.ca
- Daggett, W. & Pedinotti, J. (2005) *Globalization: Tipping the scale of economic supremacy*. A White paper published by International Center for Leadership in Education. Rexford, NY.
- Dane A., Schneider B. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? *Clinical Psychology Reviews*, 18, 23-45.
- Davis, J. (1996). Two different flight plans: Advanced placement and gifted programs: Different and necessary. *Gifted Child Today*, *19*(2), 32-36.
- Dessoff, A. (2004). Think small. District Administration, 36-39.
- Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. The Free Press. New York, NY.
- Dreeben, R. (1968). On what is learned in school. Reading, MA: Addison-Wesley.
- Editorial Projects in Education Research Center. (2011, July 7). Issues A-Z:

 Achievement Gap. *Education Week*. Retrieved June 15, 2015 from http://www.edweek.org/ew/issues/achievement-gap/
- Elliott D., Mihalic, S. (2004). The importance of implementation fidelity. *Emotional and Behavioral Disorders in Youth, 4*, 83-86.

- Fashola, O. & Slavin, R. (1998). Effective dropout prevention and college attendance programs for students placed at risk. *Journal of Education for Students Placed at Risk*, 3(2), 159-183. Retrieved from http://www.csos.jhu.edu/jespar
- Fincher-Ford, M. (1997). High school students earning college credit: A guide to creating dual credit programs. Thousand Oaks, CA: Corwin Press.
- Fletcher, J.M., & Vaughn, S. (2009). Response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93-99.
- Franklin, S. (2011). An analysis of the relationship of the AVID program on the educational outcomes attributed to college ready graduates. (Doctoral Dissertation, Tarleton State University). (Accession Order No. 3462627)
- Friedman, T.L. (2005). The world is flat. New York, NY: Farrar, Straus and Giroux.
- Fuchs, D., & Fuchs, L.S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, 41(1), 93-99.
- Furgerson, E. (2006). *Organizing the AVID student binder*: Teacher Guide. San Diego, CA: AVID Press.
- Furry, W. S., & Hecsh, J. (2001). Characteristics and performance of advanced placement classes in California. Sacramento, CA: The California State University Institute for Education Reform.
- Gandara, P. & Maxwell-Jolly, J. (1999). Finding the pump: Strategies for increasing the achievement of underrepresented minority undergraduate (College Board Report No. 987257). New York, NY: College Board Publications.

- Gordon, R., Piana, L.D., & Keleher, T. (2000). Facing the consequences: An examination of racial discrimination in U.S. Public schools. Oakland, CA.:

 Applied Research Center.
- Graesser, A.C, Person, N.K. (1994). Question asking during tutoring. *American Educational Research Journal*, 31(1), 104-137.
- Griffin, K., & Allen, W. (2006). Mo' money, mo' problems? High achieving black high school students' experiences with resources, racial climate, and resilience. *Journal of Negro Education*, 75(3), 478-494.
- Grubb, N., Lazerson, M (2013). Is the comprehensive high school doomed? Education Week. Retrieved from http://www.edweek.org/ew/articles/2004/09/22/04lazerson.h24.html
- Guthrie, L. F. & David, J. L. (1994). Advancement via individual determination (AVID): Strategies for dissemination. Burlingame, CA: Center for Research, Evaluation, and Training in Education (CREATE).
- Guthrie, L. F. & Guthrie, G. P. (2000). *Longitudinal research on AVID 1999-2000:*Final report. Burlingame, CA: Center for Research, Evaluation, and Training in Education (CREATE).
- Hale, D. (2007). The lowest quartile African Americans taking advanced placement language and literature. *The Clearing House*, 80(3), 123-125.
- Haycock, K. (2001). Closing the achievement gap. *Educational Leadership*, 58(6), 6-11.

 Retrieved from http://www.ascd.org/publications/educational-leadership/mar01/vol58/num06/Closing-the-Achievement-Gap.aspx

- Hernandez, D.J. (2011). How third grade reading skills and poverty influence high school graduation. Annie E. Casey Foundation.
- Hmelo-Silver, C., Duncan, R. & Chinn, C. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, 42(2) 99-107. Government Printing Office. doi: http://www.leaonline.com/doi/abs/10.1080/00461520701263368
- Hogan, D. M., & Tudge, J. (1999). Implications of Vygotsky's theory for peer learning.

 In A. M. O'Donnell & A. King (Eds.), *Cognitive perspectives on peer learning*(pp. 39-65). Mahwah: NJ.: Erlbaum.
- Horn, R.A. (2003). Developing a critical awareness of the hidden curriculum through media literacy. *The Clearing House v.* 76(6) 298-300. doi: 10.1080/00098650309602024
- Hubbard, L,. Mehan, H. (1999). Scaling up an untracking program: A co-constructed process. *Journal for Education for Students Placed at Risk*, *4*(1), 83-100.
- Hurwitz, N., & Hurwitz, S. (2003). Is the shine off the AP apple? *American School Board Journal*, 190(3), 14-18.
- James, D. & Partee, G. (2003). No more islands: Family involvement in 27 school and youth programs. American Youth Policy Forum. Washington, DC. Retrieved from http://ww/aypf.org
- Jones, J. D., Vanfossen, B. E., & Ensminger, M. E. (1995). School organizational effects. Sociology of Education, 68(4), 287-300.
- Jukes, I. & McCain, T. (2001). Windows on the future: Education in the age of technology. Thousand Oaks, CA: Corwin Press.

- Kacan, G., & Schipp, M. (2000). Shrinking high schools [Electronic Version]. *Primedia Business Magazine & Media*, American School and University, November 1, 2000, 1-3. Retrieved from http://www.industryclick.com//magazinearticle.
 asp?magazinearticleid=32975
- Kedie, N. (1971). Classroom knowledge. In M.F.K. Young (Ed.) *Knowledge and control* (pp. 133-159). London, UK: Routledge, Kegan & Paul.
- Keedy, J.L., & Drmacich, D. (1991). Giving voice and empowerment to student engagement: A school-based interactive curriculum. Paper presented at the Second National Conference on School Restructuring.
- Keiser, S. (2002). Stratification, disillusionment, and hopelessness: The consequences of tracking and ability grouping. *Re-envisioning education and democracy: Public intellectual essay.* Retrieved from http://www.macalester.edu/courses/educ59/PIE/Keiser-%20PIE.htm
- King, A. (1990). Enhancing peer interaction and learning in the classroom through reciprocal questioning. *American Educational Research Journal*, 27(4), 664-687.
- Klopfenstein, K.M. & Thomas, K. (2006). The link between advanced placement experience and early college success. *Southern Economic Journal*. Retrieved from http://www.utc.edu/Outreach/SouthernEconomicAssociation/southern economic-journal.html
- Kozol, J. (2005). The shame of the Nation: The restoration of apartheid schooling in America. New York, NY: Three Rivers Press.
- Lavin-Loucks, D. (2006). *The academic achievement gap*. Retrieved from www.thewilliamsinstitute.org

- Lee, V.E. & Burkam, D.T. (2002). *Inequality at the stating gate*. Washington, Economic Policy Institute. Retrieved from http://www.epi.org
- Lipovski, L.C. (2004). Teaching AVID: An investigation of pedagogy in a college preparatory program for traditionally underserved youth (Unpublished doctoral dissertation). The University of Texas, Austin.
- Lockwood, A. & Secada, W. G. (1999). Transforming education for Hispanic youth:

 Exemplary practices, programs and schools. National Clearinghouse for

 Bilingual Education, Washington, D.C. Retrieved from www.ncbe.gwu.edu/
 ncbepubs/resource
- Lord, T., & Baviskar, S. (2007). Moving students from information recitation to information understanding: Exploiting Blooms' taxonomy in creating science questions. *Journal of College Science Teaching*, *36*(5), 40-44. Retrieved from http://learningcenter.nsta.org
- Lose, M. K. (2007). A child's response to intervention requires a responsive teacher of reading. *Reading Teacher*, *61*(3), 276-279.
- Lynch, S., Kuipers, J., Puke, C. & Szesze, M. (2006). Examining the effects of a highly rated science curriculum unit on diverse students: Results from a planning grant.

 **Journal of Research in Science Teaching, 42, 921-946. doi: http://dx.doi.org/10.1002/tea.2008
- Martinez, M. & Klopott, S. (2005). The link between high school reform and college access and success for low-income and minority youth. American Youth Policy Forum and Pathways to College Network. Retrieved from http://www.aypf.org/publications/index.htm

- Martinez, V. R. (2013) *Inspiring, leading and taking risks in the service of education*.

 AVID Center. Retrieved from http://www.avid.org/dl/eve_natcon/natcon_

 2009_inspiring.pdf
- Marzano, R. & Pickering, D. (2005). *Building academic vocabulary*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McAndrews, T., & Anderson, W. (2002). Schools within schools. *Eric Digest*, ED461915 2002-01-02. McCutcheon, G. (1998). Curriculum and work of teachers. New York, NY: State University of New York Press, 191-203.
- McEneaney, J. E., Lose, M. K., & Schwartz, R. M. (2006). A transactional perspective on reading difficulties and response to intervention. *Reading Research Quarterly*, 41(1), 117-128.
- McPartland, J., Balfanz, R., Jordan, W., & Legters, N. (1998). Improving climate and achievement in a troubled urban high school through the talent development mode. *Journal of Education for Students Placed at Risk, 3,* 337-36. Retrieved from http://www/erlbaum.com/Journals/journals/JESPAR/jespar.htm
- McKenzie, K.B. (2001). White teachers' perceptions about their student of color and themselves as White educators. *Dissertation Abstracts International*, 62(12), 4014. (AAT No. 3038188)
- McKenzie, K and Scheurich, J. (2004) Equity traps: A useful construct for preparing principals to lead schools that are successful with racially diverse students.

 Educational Administration Quarterly. (DOI: 10.1177/0013161X04268839)

- Mehan, H., Hubbard, L., & Villanueva, I. (1994). Forming academic identities:

 Accommodation without assimilation among involuntary minorities.

 Anthropology and Education Quarterly, 25(2), 91-117.
- Mehan, H., Villaneuva, I., Hubbard, L. & Lintz, A. (1996). *Constructing school success: The consequences of untracking low achieving students*. Cambridge, United

 Kingdom: Cambridge University.
- Mirel, J. & Angus, D. (1994). High standards for all? The struggle for equality in the American high school curriculum (1890-1990). *American Educator*, 18(2), 4-9.
- Muñoz, M. (2012). What principals need to know about predicting ninth grade promotion for Hispanic students (Unpublished doctoral dissertation). University of Houston, Houston.
- National Association of Secondary School Principals (NASSP). (2006). *Breaking Ranks II: Strategies for leading high school reform*. Reston, VA: NASSP.
- National Center for Educational Statistics. (2000). *The condition of education* (NCES Publication 2000-062). Washington, DC: U.S. Government Printing Office.
- National Center for Education Statistics. (2004). *Conditions of education 2004*.

 Washington, DC: U.S. Department of Education. Retrieved from http://www.edpubs.gov
- National Center for Education Statistics. (2006). *The nation's report card: Science, 2005*.

 Washington, D.C.: U.S. Department of Education. Retrieved from http://www.nces.ed.gov

- National Center for Education Statistics. (2009). NAEP 2009 high school transcript study. Washington, D.C.: U.S. Department of Education. Retrieved from http://www.nationsreportcard.gov
- National Center for Education Statistics. (2015). Table 203.20: Enrollment in public elementary and secondary schools, by region, state, through fall 2023.

 Washington, D.C.: U.S. Department of Education. Retrieved from https://nces.ed.gov/programs/digest/d13/tables/dt13 203.20.asp
- National Center for Education Statistics. (2013). First year undergraduate remedial coursetaking: 1999-2000, 2003-2004, 2007-2008. Washington, D.C.: U.S. Department of Education. Retrieved from http://nces.ed.gov/pubs 2013/2013013.pdf
- National Governors Association (NGA). (2005) Graduation Counts: A report of the

 National Governors Association Task Force on state high school graduation data.

 Washington, DC: n.a.. Retrieved from http://www.nga.org
- Navarro, M. & Natalicio, D. (1999). Closing the achievement gap in El Paso: A collaboration for K-16 renewal. *Phi Delta Kapan*, 597-601.
- Nelson, J. (2007). AVIDly seeking success. *Educational Leadership*. 64(7), 72-74.

 Retrieved from http://www.ascd.org
- Nieto, S. (2000). Affirming Diversity: The sociopolitical context of multicultural education. New York, NY: Longman Press.
- No Child Left Behind Act of 2001, Pub. L. no. 107-110, 115 STAT 1425, (2002).

- North Central Regional Educational Laboratory (NCREL). (2004). *All Students*reaching the top: Strategies for closing academic achievement gaps. A Report of the National Study Group for the Affirmative Development of Academic Ability.

 Naperville, IL. Learning Point Associates. Retrieved from http://www.learningpt.org
- Northern Illinois University (NIU) (n.d.) Instructional scaffolding to improve learning.

 Northern Illinois University, Faculty Development and Instructional Design

 Center. Retrieved from http://www.niu.edu/facdev/resources/guide/strategies/
 instructional_scaffolding_toimprove_learning.pdf
- Olson, P. (1991). Referring language minority students to special education. Washington,

 DC: Office of Educational Research and Improvement. (ERIC Documentation

 Reproduction Service no. ED328131)
- Paul, R. and Elder, L. (1997). The critical thinking community: The Socratic method.

 Retrieved from https://www.criticalthinking.org/pages/socratic-teaching/606
- Paulk, W. (2001). How to study in college. Boston, MA: Houghton Mifflin.
- Payne, R. (2008). *Under-resourced learners: 8 strategies to boost student achievement.*Highlands, TX. Aha! Process.
- Pedrosa de Jesus, H., Almeida, P. & Watts, M. (2004). Questioning styles and students' learning: Four case studies. *Educational Psychology*, 24(4).
- Pennington, H., Murray, S., & Tucker, M. (2003). Accelerating advancements in school and work. *Brookin Papers on Education Policy, No. 6* pp. 339-376. The Brookings Institution. Retrieved from http://www.jstor.org/stable/20067260

- Perna, L. W. (2000). Differences in the decision to attend college among African

 Americans, Hispanics and whites. *The Journal of Higher Education*, 71(2), 117141.
- Pinkus, L. (2008). Using early-warning data to improve graduation rates: Closing cracks in the education system. *Alliance for Excellent Education*, Policy Brief, 1-14. Washington, DC.
- Pitch, L., Marchand, G., Hoffman, B. and Lewis, A. (2006). *AVID effectiveness study: Advancement via individual determination program*. Clark County School

 District, Las Vegas, NV.
- Posthuma, D. (2010). The impact of at-risk students enrolled in advanced placement courses on a high school culture Doctoral Dissertation, California State

 University, Fullerton. (Accession Order No. 3462627)
- Potter, L. & Hoque, N. (2014). Texas population projections, 2010 to 2050. Retrieved from http://osd.state.tx.us/Publications/2014-11 ProjectionBrief.pdf
- Reglins, G. (1992). Ability grouping: A scoring instrument. *Illinois Schools Journal*, 72(1), 43-47.
- Reyes, P., Scribner, J.D., & Scribner, A.P. (1999). Lessons from high-performing

 Hispanic schools: Creating learning communities. Critical issues in educational leadership series, New York, NY: Teachers College Press.
- Roberts, M. & Scott, C. (2009). *AVID/College Board 2009 National Conference*.

 Retrieved from http://www.avid.org/dl/eve_natcon/natcon_2009_

 confproceedings.pdf

- Robertson, P., Kushner, M., Starks, J., & Drescher, C (1994). An update of participation of culturally and linguistically diverse students in special education: The need for a research and policy agenda. *The Bilingual Special Education Perspective*, 14(1)3-9.
- Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in sociocultural activity. New York: Oxford University Press.
- Rorie, L. (2007). An investigation of achievement in the advancement via individual determination (AVID) program at the high school level (Unpublished doctoral dissertation). University of Denver, Denver.
- Rothstein, R. (2001). Lessons-'Scaffolding" is raised, and so are sights. New York

 Times. Retrieved from http://www.epi.org/publication/webfeat lessons20010228
- Rothestein, R. (2004). Class and schools: Using social, economic, and education reform to close the Black-White achievement gap. New York, NY: Teacher College Press.
- Ruben, B. C. & Noguera, P. A. (2004). Tracking detracking: Sorting through the dilemmas and possibility of detracking practice. *Equity & Excellence in Education*, 37, 92-101.
- San Diego Office of Education (2011). AVID certification self study requirements.

 Retrieved from http://www.sdcoe.net/lret/avid/pdf/2011-2012CSS.pdf
- Shinn, M. R. (2007). Identifying students at risk, monitoring performance and determining eligibility within response to intervention: Research on educational need and benefit from academic intervention. *School Psychology Review*, *36*(4), 601-617.

- Smink, J., & Reimer, M. S. (2005). Fifteen effective strategies for improving student attendance and truancy prevention. National Dropout Prevention Center Network.
- Smith, J. (1996). Does an extra year make a difference? The impact on early low-income youth. *Educational Evaluation and Policy Analysis*, 19(4), 325-338. College of Health, Education and Human Development, Clemson, University. Clemson, South Carolina.
- Snyder, T., Dillow, S., & Hoffman, C. (2009). Digest of Education Statistics 2008.

 National Center for Education Statistics: Institute of Education Sciences, 2009

 020. U.S. Department of Education. Retrieved from https://nces.ed.gov/pubs2009/2009020 0.pdf
- Solorzano, D., & Ornelas, A. (2002). A critical race analysis of advanced placement classes: A case if education inequality. *Journal of Latinos and Education*, 1(4), 215-229.
- Stanton-Salazar, R. (2001). Manufacturing hope and despair: The school and kin support networks of U.S.-Mexican youth. Teachers College Press: New York, NY.
- Standard ISD. (2010). High school course guidelines. Standard ISD, Texas.
- Stufflebeam, D. (2000). The CIPP model for evaluation. In D. Stufflebeam, G. Madaus,T. Kellaghan (Eds.), Evaluation Models: Viewpoints on educational and human evaluation (pp. 279-317). Neatherlands: Springer.
- Sundly, J. (2006). The student success path for high school: An embedded sequential academic skills program for refining AVID strategies in a nonelective, multisubject classroom. San Diego: AVID Press.

- Swanson, M.C. (2000). Rigor with support: Lessons from AVID. *Leadership*, 30(2), 26 27, 37-38.
- Swanson, M.C. (2002). *AVID as the catalyst for school-wide change*. In AVID Awareness Participant Materials, San Diego, CA. AVID Press.
- Texas Education Agency (2008). 2008-2009 Accountability Manual. Retrieved from http://www.tea.state.tx.us
- Texas Education Agency (2009). *Texas Graduation Plans*. Retrieved from ritter.tea.state.tx.us/comm/pdfs/2010summary gradplans.pdf
- Texas Education Agency (2009). *Texas graduation plans*. Retrieved from ritter.tea.state.tx.us/comm/pdfs/2010summary_gradplans.pdf-2010-02-03
- Texas Education Agency (2010a). *First generation college student initiative*. Retrieved from http://www.tea.state.tx.us
- Texas Education Agency. (2010b). *Side by side summary of 2010-2011 graduation requirements*. Retrieved from tea.texas.gov/WorkArea/DownloadAsset. aspx?id=2147494170
- Texas Education Agency. (2010-2011). *Academic excellence indicator system*. Retrieved from http://www.tea.state.tx.us/perfreport/aeis/
- Texas Education Agency. (2011). *TAKS resources*. Retrieved from http://www.tea.state.tx.us/student.assessment/taks/
- Texas Education Agency. (2011b). *Enrollment in Texas public schools*. Retrieved from tea.texas.gov/acctres/Enroll_2010-11.pdf
- Texas Education Agency. (2012). *Academic excellence indicator system (2011-2012)*. Retrieved from http://www.tea.state.tx.us/perfreport/aeis/

- Texas Education Agency (2012a). *Grade 9 longitudinal graduation, completion, and dropout rates, Texas public schools, class of 2011*. Retrieved from http://ritter.tea.state.tx.us/acctres/completion/2011/state.html
- Texas Education Agency (2013). *Adequate Yearly Progress*. Retrieved from http://www.tea.state.tx.us/ayp/
- Texas Department of State Health Services (2013). *Texas Population, 2010*. http://www.dshs.state.tx.us/chs/popdat/ST2010.shtm
- Texas Education Code (2010). Section 25.085. *Compulsory student attendance*.

 Retrieved from http://wwww.statutes.legis.state.tx.us
- Texas Legislative Budget Board (2007). Public high school to college transitions:

 Barriers and best practices-A snapshot of Texas within a national context.

 Retrieved from www.lbb.state.tx.us
- The College Board (2010). *The 6th annual AP report to the nation*. Retrieved from http://www.collegeboard.com
- Tomlinson, C. A. (2003). Deciding to teach them all. *Educational Leadership*, 61(2), 6-11.
- Tomlinson, C. A. (2008). The goals of differentiation. *Educational Leadership*, 26-30.
- Treisman, U. (1993). Studying students in Calculus: A look at the lives of minority mathematics students in college. *The College Mathematics Journal*, *23*(1), 362-372. Retrieved from http://www.maa.org

- Trent, W., Owens-Nicholson, D., Eatman, T. K., Burke, M., Daugherty, J., & Norman, K. (2003). Justice, equality, and affirmative action in higher education. In M.J. Chang, D. Witt, J. Jones, & K. Hukuta (Eds.), *Compelling interest: Examining the evidence of racial dynamics in colleges and universities* (pp. 22-48). Stanford, CA: Stanford University Press.
- Tuma, J. & Geis, S. (1995). *High school and beyond: 1992 descriptive summary of 1980 high school sophomores 12 years later.* Washington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement. Retrieved from http://www2.ed.gov/offices/OER/index.html
- Turner, G. (1983). *The hidden curriculum of examination*. Appears in Hammersley, Martyn & Hargreaves, Andy (eds.) (1983). *Curriculum practice: Some sociological case studies*. New York, NY: The Farmer Press.
- U.S. Department of Education. (2004). *Individuals with disabilities improvement act of 2004*, Pub. L. 108-446. Federal Register, 70, 35802-35803.
- U.S. Department of Education. (2012). *Elementary and secondary education act: Part A improving basic programs operated by local educational agencies*. Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/pg2.html#sec1111
- Useem, E. (1990). Social class and ability placement in mathematics in the transition to seventh grade: The role of parent involvement. American Educational Research Association. Boston, Massachusetts.
- VanScriver, J. (2005). NCLB fitfully fits differentiated instruction. *Education Digest*, pp. 37-39.

- Voltz, T. (2012). A longitudinal study of the success of response to intervention for educational leaders (Unpublished doctoral dissertation). University of Houston, Houston.
- Vygotsky, L.S. (1978). Mind in society. Cambridge, MA: Harvard University Press.
- Watt, K.M., Yanez, D. and Cossio, G. (2003). AVID: A comprehensive school reform model for Texas. *National Forum of Educational Administration and Supervision Journal*, 19(3), 43-59. Retrieved from http://www.tcrecord.org/
- Watt, K.M., Powell, C.A., & Mendiola, I.D. (2004). Implications of one comprehensive school reform model for secondary school students underrepresented in higher education. *Journal of Education for Students Placed At Risk*, 9(3), 241-259.
- Watt, K., Johnson, D., Huerta, J., Mendiola, I. and Alkan, E. (2008). Retention of first generation college-going seniors in the college preparatory program AVID

 American Secondary Education 37(1), 17-40. Retrieved from http://www.ashland.edu/academics/education/ase/
- Watt, K., Powell, C.A., Mendiola, I.D., & Cossio, G. (2006). Schoolwide impact and AVID: How have selected Texas high schools addressed the new accountability measures? *Journal of Education for Students Placed at Risk, 11*, 57-73. Retrieved from http://www.ed.psu.edu/Catalyst

- Watt, K.M., Huerta, J., & Lozano, A. (2007). A comparison study of AVID and GEAR

 UP 10th grade students in two high schools in the Rio Grande Valley of Texas. *Journal of Education for Students placed at Risk, 12,* 1-29. doi:

 http://www.informaworld.com/openurl?genre=article&id=doi:10.1080/10824660

 701261136
- Weiher, G.R., Hughes, C., Kaplan, N., & Howard, J. (2006). Hispanic college attendance and the state of Texas GEAR UP program. *Review of Policy Research*, 23, 1035-1051. doi: 10.1111/j.1541-1338.2006.00248.x
- Wenning R., Herdman P. A., Smith N., McMahon N., & Washington K. (2003). *No Child Left Behind: Testing, Reporting, and Accountability*. ERIC Digest.
- Wheelock, A. (1992). Crossing the tracks: How "untracking" can save America's schools. New York: The New Press.
- Whitaker, V. (2005). The effects of the advancement via individual determination on course taking patterns and achievement of high school students (Unpublished doctoral dissertation). Virginia Polytechnic Institute and State University, Blacksburg.
- Williams, B. (2003). Closing the achievement gap: A vision for changing beliefs and practices. Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from http://ascd.org
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 17(2), 89–100.

Zhang, G., Zeller, N., Griffith, R., Metcalf, D., Williams, J., Shea, C., Misulis, K. (2011).

Using the context, input, process and product evaluation model (CIPP) as a comprehensive framework to guide the planning, implementation, and assessment of service-learning programs. *Journal of Higher Education Outreach and Engagement*, 15(4), 57-84. Retrieved from http://files.eric.ed.gov/fulltext/ EJ957107.pdf

APPENDIX A $\label{eq:APPENDIX A} \mbox{APPROVAL OF APPLICATION TO CONDUCT RESEARCH IN A MIDSIZED GULF } \mbox{COAST SCHOOL DISTRICT}$

Appendix A

Approval of Application to Conduct Research in a Midsized Gulf Coast School District

Independent School District

May 04, 2012

Christyn McCann 22903 Meadow Lane Tomball, TX 77377

Dear Ms. McCann:

The _______, is pleased to inform you of their approval for you to conduct your study "The Impact of the AVID Program on Student Success in a Midsize Suburban District in the Southwestern United States". It is our understanding that this study will be conducted during spring of 2012 and will involve the analysis of student performance and assessment data.

Approval to conduct the study in the study i

- · Campuses must remain anonymous.
- District nor campus personnel are not identified in the study.
- Data remains confidential.
- The study remains quantitative in nature.
- The study does not infringe upon designated instructional time on a campus.
- Approval to conduct the study is granted only for fulfillment of a Doctoral degree at the University of Houston.
- The district receives copies of the completed final report within 30 days after its completion.

Any changes or modifications to the current proposal must be submitted for approval to the Department of Accountability and School Improvement. The district reserves the right to forego its participation in the study at any time without reason. Should you need additional information or have any questions concerning the process, please contact Stanley D. Hall, Ph.D. at

Sincerely.

Susan Borg, Ed.D.

Cc: Angie Anderson Cynthia Galindo

APPENDIX B APPROVAL BY THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS TO CONDUCT RESEARCH

Appendix B

Approval by the University of Houston Committee for the Protection of Human Subjects

to Conduct Research

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

October 1, 2015

Mrs. Christyn McCann c/o DR. Michael Emerson Curriculum and Instruction

Dear Mrs. Christyn McCann,

Based upon your request for exempt status, an administrative review of your research proposal entitled "AN ANALYSIS OF EDUCATIONAL ACHIEVEMENT: AN EVALUATION OF THE ADVANCEMENT VIA INDIVIDUAL DETERMINATION PROGRAM IN A MIDSIZED GULF COAST SCHOOL DISTRICT" was conducted on July 15, 2015.

At that time, your request for exemption under <u>Category 4</u> was approved pending modification of your proposed procedures/documents.

The changes you have made adequately respond to the identified contingencies. As long as you continue using procedures described in this project, you do not have to reapply for review. * Any modification of this approved protocol will require review and further approval. Please contact me to ascertain the appropriate mechanism.

If you have any questions, please contact Alicia Vargas at (713) 743-9215.

Sincerely yours,

Kirstin Rochford, MPH, CIP, CPIA Director, Research Compliance

*Approvals for exempt protocols will be valid for 5 years beyond the approval date. Approval for this project will expire **September 30, 2020**. If the project is completed prior to this date, a final report should be filed to close the protocol. If the project will continue after this date, you will need to reapply for approval if you wish to avoid an interruption of your data collection.

Protocol Number: 15601-EX

316 E. Cullen Building Houston, TX 77204-2015 (713) 743-9204 Fax: (713) 743-9577

COMMITTEES FOR THE PROTECTION OF HUMAN SUBJECTS.