2009

A Comparison Study Of Florida Middle Schools With Advancement Via Individual Determination (AVID) And Non-AVID Middle Schools

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A COMPARISON STUDY OF FLORIDA MIDDLE SCHOOLS WITH *ADVANCEMENT VIA INDIVIDUAL DETERMINATION* (AVID) AND NON-AVID MIDDLE SCHOOLS

by

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A dissertation submitted in partial completion of the requirements
for the degree of Doctor of Education
in the Department of Educational Research, Technology, and Leadership
in the College of Education
at the University of Central Florida.
Orlando, Florida

Fall Term
2009

Major Professors: Walter Doherty & Ken Murray

ABSTRACT

With the passage of the No Child Left Behind Act, schools and school districts have come under increased pressure to demonstrate student proficiency and success at the elementary, middle and high school levels. Each state is required to use standardized test data as evidence of student proficiency. The data is collected by each state and reported to the federal government to demonstrate progress.

In Florida, the exam used to record proficiency is the Florida Comprehensive Assessment Test (FCAT). At all three levels, the FCAT is administered annually and the results are used to create school grades ranging from A-F. Florida high schools fall in the lowest 10% in the nation for graduation rates, graduating less than 60% of high school students. The pressure created by these high stakes tests have led to a growth in Florida secondary schools implementing the Advancement Via Individual Determination (AVID) program. AVID seeks to offer a rigorous curriculum with additional support to underserved students. However, some literature demonstrates that schools with AVID improve the success of not only AVID students, but the overall population as well. This is commonly referred to as the "AVIDization" of a school.

This study used an independent t-test to compare middle schools in eleven Florida county school districts with AVID to non-AVID schools in the

2007-2008 school year in six main areas; a) FCAT Math scores, b) FCAT Reading scores, C) overall FCAT scores, d) frequency of disciplinary incidences, e) attendance rates, and f) overall FCAT scores with controlled data. In this study, 85 middle schools had AVID and 179 middle schools were non-AVID.

In comparing AVID to non-AVID students in the six areas, the t-test demonstrated that schools with the AVID program did not outperform non-AVID schools in the three FCAT tested areas. Also, the data shows that AVID schools were more likely to have higher reported rates of disciplinary incidences then non-AVID schools.

I would like to dedicate this study to my wonderful wife, Christina, who for four years has provide me with the love and support necessary to complete my work. I would also like to dedicate this study to my loving parents: Tip and Joan Lifvendahl, who have instilled in me a love of learning and continuous support to complete this degree.

ACKNOWLEDGMENTS

This dissertation would not have been possible without the help of many people. First, I would like to acknowledge Dr. Walter Doherty, a Co-chair of my dissertation committee, who for the past two years has guided me through the process, providing me with continuous feedback and support. His knowledge, understanding and appreciation for AVID has offered new incites into this study. Most important, his patience was critical as a means of curbing my continuous desire to push this study to completion.

I would also like to acknowledge Dr. Kenneth Murray, a Co-chair of the committee and my advisor early in the program. His wonderful attitude and guidance helped me understand the process and procedures for the Ed.D. Program.

I would also like to acknowledge my committee members: Dr. Barbara Murray, whose incites helped expand this study to include a more diversified examination of AVID in the Florida middle schools; and Dr. Conrad Katzenmeyer whose knowledge helped shape the final outcome of this research.

In addition, I would like to acknowledge my friend and mentor, Dennis Neal, who, as principal of Heritage Middle School, for four years has supported and encouraged me to continue this program.

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THE PROBLEM AND ITS CLARIFYING COMPONENTS

Introduction

Following the desegregation ruling by the Supreme Court of the United States in the case of *Brown v. Board of Education of Topeka*, 347 U.S. 483 (1954), many schools began tracking programs, or homogenous grouping, as a way of separating "advanced" and "average" students. In 1980, Clairemont High School, in the San Diego Unified School District, began federal court ordered integration. That year, a large portion of the affluent population left Clairemont and 500 low-income, ethnically diverse students were bused into the school. This influx of new, ethnically diverse students altered the culture and climate of the school. Teachers viewed the new students as outsiders in their tight knit community. The new students quickly realized their acceptance would not be smooth. The Clairemont High School English Department Chairperson and A.P teacher, Mary Catherine Swanson, believed that these new students enrolled at Clairemont were as intelligent as their affluent counterparts. However, they had been enrolled in lower level classes, not challenged, and, in response, had performed poorly in school. In an effort to resist the potential for tracking at Clairemont, Ms. Swanson wanted to help motivate and prepare the students for college by challenging them to a more rigorous curriculum while providing them with additional skills and support.

That year, Ms. Swanson founded *AVID*. *AVID* is the acronym for *Advancement Via Individual Determination* and comes from the Latin word "avidus" meaning "eager for knowledge" (Swanson, 2000, p. 2). According to Swanson, the purpose of *AVID* is two-fold. The first goal is to increase college participation among the most underrepresented groups in post secondary education: Latinos, African-Americans and Alaskan/Native Americans students. Secondly, to create a secondary school structure that made college preparatory teaching methods available to all students (Swanson, Mehan, & Hubbard, 1993, p. 1).

AVID has become one of the largest international untracking programs and has spread to over 4,000 schools in 45 states and 15 countries (avidonline.org). Two of the largest states in America in both land size and total population, California and Texas, have made widespread use of AVID. This researcher first became involved with AVID as the 8th grade assistant principal at Heritage Middle School. The Volusia County School District in Florida instituted AVID in the middle schools and this researcher was assigned the role of AVID Administrator at Heritage. Shorty thereafter, this researcher participated in the 2007 AVID National Conference in San Diego, California. There, he attended workshops, heard presenters and engaged in planning sessions designed to help teachers, students, principals and district staff implement and strengthen AVID programs throughout the United States.

Recently, AVID has begun to spread throughout Florida and is currently being implemented in eleven county school districts: Brevard, Broward, Citrus, Duval, Hillsborough, Indian River, Lee, Dade, Orange, Osceola, and Pinellas counties.

Stonewall Jackson Middle School in Orange County, Florida, recently achieved the honor of becoming an AVID National Demonstration School. This title is only bestowed upon schools that not simply meet the strict guidelines created by AVID, but far exceed the standards. On a recent visit to Stonewall Jackson Middle School, this researcher discovered the AVID program is a model for all other schools interested in incorporating AVID or those schools interested in improving an existing AVID program. Dr. Joseph Miller, the principal of Stonewall Jackson, repeated stressed the important role that AVID has played in helping change the culture and climate of AVID throughout the school. "Ultimately", Dr. Miller said, "the effect of AVID has served all our students, not only those enrolled in the program".

Research has demonstrated that AVID not only improves the achievement levels of AVID students, it may also improve the achievement level of all the students in AVID schools. According to several studies conducted in Texas (Watt et. al.), improvements were shown in the areas of test scores, attendance and grade point averages of students enrolled in AVID schools as

compared to non-AVID schools. This school-wide improvement is commonly referred to as the "AVIDization" of a school.

Statement of the Problem

The purpose of this study was to compare the 85 middle schools in the state of Florida having implemented AVID and the 179 middle schools not having added the AVID program in the 2007-2008 school-year in Brevard, Broward, Citrus, Duval, Hillsborough, Indian River, Lee, Dade, Orange, Osceola, and Pinellas counties as to their students performance on the Florida Comprehensive Achievement Test (FCAT) scores as well as attendance and disciplinary incidences. Ultimately, this study was conducted to determine if "AVIDization" occurs at schools with the AVID program. In the future, this researcher hopes that through the results of this research, principals and district leaders will have more information and data to assist them in determining if AVID is a program that best suits the needs of their "students in the middle" as well as the entire student population.

Definition of Terms

FCAT-The Florida Comprehensive Achievement Test

FCAT Math-For this study, FCAT Math describes the percent of students in a specific school who achieved the score of Level 3 or above on the math portion of the exam.

FCAT Reading- For this study, FCAT Reading describes the percent of students in a specific school who achieved the score of Level 3 or above on the reading portion of the exam.

Level 3 or above-This term refers to a level of performance on the FCAT which demonstrates proficiency.

Total FCAT Points-This term refers to the total number of points scored by a school in eight separate areas on the FCAT exam including the math and reading sections. The accumulation of point determines the School Grade.

School Grade-In Florida, each school receives an overall letter grade that is determined based on the Total FCAT Points. The points and grade equivalent are as follows:

A=>524 B=524-495 C=494-434 D=433-395 F=<395

Attendance Rates-This term refers to the number of students in a school who have missed 21+ days in a school year.

Disciplinary Incidents-This term refers to major disciplinary offences, commonly classified as level 3 or above. Level 3 offences include, but are not limited to, drug possession, sexual harassment, battery, auto theft, and weapons possession. This data is reported to the State of Florida by each school in the form School Environmental Safety Incident Reporting (SESIR).

Minority Rate-This term refers to the percentage of students in a school who as classified as a minority.

Free & Reduced Lunch-This term refers to the percentage of students in a school who receive free or reduced lunch based on their family annual income level. To receive free or reduced lunch, families must apply through the school.

Population Size-This term refers the total student enrollment of a school.

AVIDization- This term refers to data that shows schools with the AVID program demonstrate greater improvement in several academic areas than non-AVID schools.

Delimitations

The following limitations of the study were recognized in conducting the research:

1. This study only examined middle schools in eleven Florida county school districts that have AVID in their schools. This study does not include the middle schools in the 65 other county school districts in Florida.

2. This study also relied on attendance and disciplinary data submitted to the Florida Department of Education by each school. Therefore, this data is only as accurate as the schools are willing to report. Depending on the schools and the schools district, the cases of disciplinary incidents and absenteeism may be under reported or over reported.

Limitations

The following delimitations of the study were recognized in conducting the research:

1. Were the results of the study a consequence of the student population of the sample schools.

2. Were the results of the study a consequence of the AVID schools having a larger percentage of minority students and students on free/reduced lunch.
3. Were the results of the study a consequence of non-AVID schools having larger populations of nonminority students from middle and upper income families.

Assumptions

The specific assumptions in this study were as follows:

1. The 2007 FCAT was properly administered.
2. All requirements associated with test security were met.
3. The tests were collected, transported and scored appropriately.
4. The data submitted to the Florida Department of Education relating to both attendance and discipline were accurate.

Theoretical Framework

Tracking systems, or homogeneous groupings, have long been used by elementary and secondary schools as a means of separating students into "ability" groups. Separate curriculum are used for low, middle and high achieving students. However, research (Oakes, Wheeler) has shown that tracking programs create lower performing students. This research, along with the rigorous testing demands and stringent oversight created by No Child Left

Behind, has brought about “detracking”, or heterogeneous groupings. Detracking moves students out of their previously defined tracks and creates classrooms with students of all abilities.

Advancement Via Individual Determination (AVID) is one detracking program that seeks to meet the needs of the often underserved students “in the middle”. AVID targets mostly low income, minority students who have above average test scores but who have been placed in a low or middle track. AVID breaks these students out of these tracks, placing them in advanced classes and introduces the students to a world of college preparation.

AVID students make commitments for attendance levels, disciplinary standards, mandatory homework, above average grades and volunteering to enroll in the AVID Elective. In return, the students are exposed to a rigorous curriculum and academic skills for college preparation. Ultimately, the additional rigor and support increase student success in high school and increased student acceptance at the post secondary level.

Data collected by research in several high schools in Texas demonstrated that AVID students have better standardized test scores, lower absenteeism, higher GPAs, as well as, higher rates of college acceptance than non-AVID students (Hubbard & Mehan).

However, research has also demonstrated that AVID not only improves AVID students, it may also improve the achievement level of all the students in

AVID schools. According to several studies conducted in Texas (Watt et. al.), improvements were shown in the areas of test scores, attendance and grade point averages of students enrolled in AVID schools as compared to non-AVID schools. This school-wide improvement is commonly referred to as the "AVIDization" of a school.

Research Questions

The following research questions were used to guide this study:

1. What is the difference, if any, in the mean FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

2. What is the difference, if any, in the mean FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

3. What is the difference, if any, in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

4. What is the difference, if any, in mean number of students with 21+ days of absences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts

5. What is the difference, if any, in mean disciplinary incidents in the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

6. What is the difference, if any, in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts when the research controlled for population size, minority and free/reduced lunch percentage and percentage of AVID students?

Hypotheses

In addition, the following research hypotheses were proposed:

H1: There is no difference in the mean FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts.

H2: There is no difference in the mean FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts.

H3: There is no difference in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts.

H4: There is no difference in mean number of students with 21+ days of absences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts.

H5: There is no difference in mean disciplinary incidents in the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts.

7. H6: There is no difference in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts when the research controlled for population size, minority and free/reduced lunch percentage and percentage of AVID students.

Methodology

A t-test was used to determine if differences exist between the two groups in the six areas of study. The dependent variables will be the FCAT Math scores, FCAT Reading scores, the total FCAT points earned by each school, the attendance rates and the number of disciplinary incidents reported by each school. The independent variable will be the two groups in the study; the AVID and the non-AVID middle schools. Also, for Research Question #6, several sets of data will been controlled. All the schools in Research Question #6 will have at least 900 students, will have a minority population of at least 50%, a free/reduced lunch population of at least 40%, and the AVID schools will have at least 5% of the population enrolled in the AVID program.

Organization of the Study

Chapter 1 has introduced the problem statement and the design components of the study. Chapter 2 presents a review of the literature which supports the problem statement. Chapter 3 contains the design of the study and the details of the population, instrumentation, and the statistical procedures. Chapter 4 reports the analysis of the data collected for the study. Chapter 5 offers a summary and discussion of the results and findings of the study and their implications and recommendations for future research.

Significance of the Study

This study seeks to determine if a difference exists between middle schools with AVID and non-AVID schools and school-wide success on the FCAT exam. Also, this study seeks to determine students at AVID schools have lower rates of chronic absenteeism and fewer major disciplinary incidences. If a difference does exist, more schools and school districts may be willing to implement AVID in their schools as a way of not only helping students "in the middle" prepare for college but as a means of helping all students succeed. If a difference does not exist, school and school districts may be better served spending their limited resources in other areas.

CHAPTER 2:
REVIEW OF LITERATURE

Brief Review of Tracking Programs

Since the 1920s, most elementary and secondary schools have created tracking systems to separate students into "ability" groups. According to Oakes, "Tracking has seemed logical because it supports a nearly century old belief that a crucial job of schools is to ready students for an economy that requires workers with quite different knowledge and skills" (1995, pg. 681). Based on this ideology, rigorous coursework prepared bright students to attend college and on to "white collar" jobs. Simultaneously, basic classes and vocational programs were offered to less motivated students to prepare them with technical training. According to Oakes, "With the development early in the century of standardized tests for placement, most people viewed a tracked curriculum with its "ability grouped" academic classes as functional, scientific and democratic" (1995, pg. 682). Yet, despite its widespread acceptance, these tracking programs created unequal and unacceptable differences in educational programs for all students. Schools were far more likely to judge African American and Latino students as having learning disabilities and limited potential. Thus, these ethnic and racial groups were disproportionately placed in low-track, remedial programs. School tracking programs created

racially separate programs that restricted the educational opportunities for many minority students.

Not only do tracking programs limit opportunity for minority students, it has been argued that tracking has negative impact on students' self esteem. In a study conducted by Schafer and Olexa, 1227 male students were given surveys and, using a Likert scale, evaluated themselves with regards to potential for future success. Approximately fifty percent, 564, were classified as college bound while fifty percent were classified as non-college bound. These two groups were in separate tracks in school, following different programs with separate graduation requirements and educational opportunities. The results of this study found that the males in the non-college track labeled themselves as being inferior to the college bound students. Track position was directly related to self esteem.

The failures associated with tracking programs have only been highlighted over the last twenty years as the United States has expanded its use of specific standardized tests to evaluate academic preparation and college readiness for all students. According to the National Center for Educational Statistics (NCES) these tests have demonstrated the dramatic achievement gaps that have developed in this country. For example, the NCES published data showing that among 8th-graders, there is an achievement gap between White-Black and White-Hispanic scores. The White-Black 8th-grade

mathematics gap was lower in 2007 than in 2005, but there was no measurable change in the White-Hispanic gap. In 2007, among 8th-graders, the White-Black mathematics gap was 32 points, and the White-Hispanic gap was 26 points. While this is only one example of the achievement gap in America, the NCES and other research groups have demonstrated that the achievement gap exists in all subject areas across several grade levels including 4th, 8th and 12th. In order to reduce these achievement gaps, districts have begun detracking programs to offer equal access to high quality, rigorous, college bound curriculum for all students. One such program is AVID.

History of Advancement Via Individual Determination (AVID)

In 1980, Clairemont High School, in the San Diego Unified School District, began federal court ordered integration. That year a large portion of the affluent population left Clairemont and 500 low-income, ethnically diverse students were bused into the school. This influx of new, ethnically diverse students altered the culture and climate of the school. Teachers viewed the new students as outsiders in their tight knit community. The new students quickly realized their acceptance would not be smooth. The Clairemont High School English Department Chairperson and A.P teacher, Mary Catherine Swanson, believed that these new students enrolled at Clairemont were as intelligent as their affluent counterparts. However, they had been enrolled in

lower level classes, not challenged, and, in response, had performed poorly in school. Ms. Swanson wanted do help motivate and prepare the students for college by challenging them to a more rigorous curriculum while providing them with additional skills and support.

That year, Ms. Swanson founded the AVID Program. AVID is the acronym for *Advancement Via Individual Determination* and comes from the Latin word "*avidus*" meaning "eager for knowledge" (Swanson, 2000, p. 2). According to Swanson, the purpose of AVID is twofold. The first goal was to increase college participation among the most underrepresented groups in post secondary education; Latinos, African-Americans and Alaskan/Native Americans students. Secondly, to create a secondary school structure that made college preparatory teaching methods available to all students (Swanson, Mehan & Hubbard, 1993, p. 1).

Ms. Swanson understood that with the creation of a new program in a school she needed to "carefully consider the power structure and political ramifications of my action on the school and the district" (Swanson et. al., 1993, p. 4). First, she received the "go-ahead" from her principal, a man preparing for his retirement the following year and willing to allow a teacher to begin a new project. Second, she contacted the head of Student Outreach at the University of San Diego to recruit tutors for the AVID students. She used grant money to pay these college students. The tutors worked three class

hours per week; two of which were devoted to direct instruction in writing (Swanson et. al., 1993, p. 4). Finally, Ms. Swanson recruited 30 ethnically and culturally diverse students who were not enrolled in college classes and had a GPA of between 1.5 and 2.5. They agreed to enroll in college preparatory classes and do homework regularly in exchange for an elective class with both academic and emotional support (Swanson et. al., 1993, p. 5).

Ms. Swanson's first problem came in the form of faculty skepticism. "Truthfully, few teachers believed that the AVID students would be successful and many thought the bussed-in students should be enrolled in remedial classes" (Swanson et. al., 1993, pg. 5). She continually struggled with teachers who did not believe that they should accept all students as they arrived on campus.

At the beginning of the AVID Program, students received binders filled with note taking paper and record keeping forms. They were taught and required to use the Cornell note taking system. This strategy helped focus the AVID elective class around the inquiry method to help students clarify their questions. As an English teacher, Ms. Swanson understood the value of writing as a learning tool. She required students to keep learning logs and practice with short, quick writes to organize their thoughts. Students were also encouraged to write and speak in non-threatening "thinking language". This practice helped legitimize their own voices and the students did not have

to be preoccupied with using “correct” English (Swanson et. al., 1993, p. 6). This informality helped create a classroom of interaction and participation which, in turn, helped students improve their understanding of language.

As AVID gained success, Ms. Swanson realized that she needed to gain faculty support and address needed improvements in both the curriculum and instruction. The catalyst for this event was an investigation into alleged cheating. A science teacher claimed that the AVID students had cheated on an exam because they all received an “A” or “B”. During the investigation it was discovered that all of the AVID students maintained excellent notes and worked in groups during their AVID elective class to prepare for exams. Once it was understood by the faculty that the AVID students were not cheating but, in fact, excelling, the teachers became more interested in AVID pedagogical techniques. The AVID teachers invited the faculty to visit their room. Ms. Swanson also asked the faculty if the AVID tutors could attend classes and take notes to help the program. Many faculty members, now with college students in their classrooms taking notes, began to improve their own pedagogical techniques (Swanson et. al., 1993, p.8). Tutors also began working in non-AVID classrooms and using many of the writing and note taking strategies developed in the AVID program. By the spring, the faculty was meeting regularly with AVID students to discuss strategies and techniques to improve instruction school-wide. By 1984, Clairemont scores on the

Comprehensive Test of Basic Skills (CTBS) had improved 46.6% higher than the district wide average increase in language and 35% higher in math (Swanson et. al., 1993, p. 10).

The Components of AVID

In 1986, Ms. Swanson was called upon by the San Diego County Office of Education to disseminate AVID. AVID had attracted attention not only due to the fact that it promoted success among underrepresented students but because of the vast improvement of scores on the CTBS. However, for the AVID Program to function as it was designed, Ms. Swanson believed a school would have to follow six major goals: 1) Convince school leaders to recognize the achievement gap; 2) Identify an outstanding teacher to lead the program and recruit teams of teachers in all schools; 3) Add the AVID elective to all schedules; 4) Find funds to pay the AVID tutors; 5) Begin staff development programs for teachers, counselors, administrators and tutors; 6) Develop coordinated school site plans (Swanson et. al. 1993, pp. 10-11).

Initially, the school must recognize the issue of educational disparity. "Many schools deny reality. They do not realize that underrepresented students are not performing at the upper limits of their academic potential" (Swanson et. al., 1993, p. 11). Therefore, Ms. Swanson suggests that data be used to demonstrate the need for a focus on underrepresented students. A

wide range of data are available for all schools including local district reports, state standardized tests, and federal Title I accounting information. These forms of data can highlight the disparities associated with ethnically and culturally diverse students.

The selection of the AVID lead teacher is a critical first step in the development of a successful AVID program. Most importantly, the instructor must have the respect of their colleagues, be able to help teach other instructors new and diverse teaching methodologies. But they must be more than a school based educator. "The teachers must be coach to the students, working with every aspect of the student's life that affects academic performance" (Swanson et. al. 1993, pp. 11-12).

Schools often face a difficult struggle with adding the AVID elective to the Master Schedule. However, this elective is a critical key to the success of the AVID students. This elective serves the needs of the students as they face the rigors of Advance Placement courses and Cornell note taking techniques.

Hiring tutors becomes another major task that can impede the AVID Program at a school. Often, schools do not have extra funds available for the tutor and must go to School Improvement Program funds. However, these tutors must be available to assist the lead teachers in the elective and also be role models for the AVID students.

Staff development becomes another critical area. This development begins with the AVID Summer Institute. This week long institute teaches site teams to examine school data, develop vision statements, to learn about writing, study the inquiry process and research student collaboration. Thus, when the AVID team returns to its site, the team members have an understanding of the overall beliefs and methodologies of the AVID philosophy. Each year, site teams are called upon to continue to attend workshops and enhance their understanding of AVID methods.

Finally, the AVID Program strives to build a strong cohesive educational plan. Many schools have a variety of goals and ideas that can lead people in several directions. "AVID seeks to amalgamate the plans into a cohesive overall plan which guides the school toward goals which provide excellent education for *all* students" (Swanson et. al., 1993, p. 13).

Yet, the success of an AVID Program is not born solely out of these six core elements, but includes several social processes and institutional practices. One social process is the isolation and identification of the AVID students. Much like an athletic team, AVID students often have shirts that identify them as members. They attend many of the same classes and share the AVID elective several times a week. This process strengthens the bonds of the AVID students and they begin to view themselves as a team whose success or failure often hinges on the collaboration and team work.

After this isolation and identification, AVID students are exposed to what Swanson refers to as a "hidden curriculum". This "hidden curriculum" includes such concepts as test taking skills and practice exams to prepare students for the ACT and SAT tests for college entrance. The students learn to eliminate distracting answers and other "tricks" taught in Princeton Review classes. Also, the AVID elective incorporates extensive work on the college application process including filing applications, applying for grants, loans, financial aid and scholarships.

Teacher advocacy is another element of the AVID success. The AVID teachers often take it upon themselves to ensure success for their students. If a student misses school, the AVID teacher may call home with all the missed assignments. From discipline to extra tutoring, the lead teacher becomes a constant advocate. According to Swanson (2003), this strategy removes the burden of failure away from the student toward a teacher who must constantly monitor progress.

In 2002, a study was conducted by Guthrie & Guthrie of the Center for Research, Evaluation and Training in Education (CREATE). *The Magnificent Eight:* AVID *Best Practice Study,* the study found that not only are there 11 essential components of the AVID Program, the researchers also believe that three additional components should be added. Also, the study found that the

AVID Program did more than meet the needs of AVID students but that there was a greater school wide AVID effect. These 11 Essentials are:

- AVID student selection focuses on students in the middle with academic potential, who would benefit from the AVID support to improve their academic record and begin college preparations.
- AVID program participants, both students and staff must participate voluntarily.
- The school must be committed to full implementation of the AVID program, with the AVID elective class available during the academic school day.
- AVID students must be enrolled in a rigorous course of study that will enable them to meet the requirements for university enrollment.
- The AVID elective must have a strong, relevant writing curriculum.
- Inquiry is used as the foundation of the AVID elective.
- Collaboration is used as the basis for instruction in the AVID classes.
- A sufficient number of tutors must be available in the AVID elective to help facilitate a rigorous curriculum.
- AVID program implementation and students progress are monitored through the AVID Data System.
- The school or district has resources for the programs costs, has agreed to implement AVID Program Implementation Essentials and to participate in AVID Certification.
- An active interdisciplinary site team collaborates on issue of student access and success in rigorous college preparatory classes.

First, the AVID student selection must focus on students in the middle (2.0-3.5 GPA as one indicator) with academic potential who will benefit from the support offered by the program. If the right students are not admitted, the program will not succeed. Individual sites attempting to successfully implement the AVID Program must adhere to this guideline. School leaders often pressure educators to have higher and lower achieving students to be included in AVID. However, over time, stronger students found they did not need the extra work and support of the AVID Program and the weaker students

chosen for admission found themselves overwhelmed with the difficulties of the program and dropped out (Swanson et. al., 2000) This strict admissions process also helps strengthen the teachers' belief in the program. "Convinced that students have been correctly identified, the teachers do all within their power to keep students in the program" (Guthrie & Guthrie, 2002 p. 5). With each passing year the demands for the program become more rigorous and it is the motivation and commitment of the AVID teachers that often is the difference between success and failure of the students.

AVID participants, both teachers and students, must volunteer and be willing participants. "All the programs reported this essential was indispensable" (Guthrie & Guthrie, 2002, p. 5). This begins at the admissions interview process. Teachers must be honest with potential students regarding the demands of the program. When students volunteer to enter the AVID Program they view education and learning as acts of free will. This helps produce the maturity and motivation the students need to become disciplined, free thinkers and, ultimately, successful students. Teachers must not be appointed but must also volunteer for participation in the AVID Program. Without this willingness to be a member of the AVID team, educators may not be committed to attending staff development workshops, redesign their curriculum or provide the loving, caring and rigorous classroom atmosphere needed to ensure the success of AVID. Without this commitment to the

program, the teachers will not follow the 11 Essentials and fail the AVID Program.

The AVID students must be enrolled in rigorous course work that will help them meet the requirements for enrollment in college and universities. Each student is required to take at least one Advanced Placement (A.P.) class during the four years in high school. These A.P. classes offer the rigorous expectations of a college level class. Also, upon completing an A.P. course, high school students may take an Advanced Placement exam to receive college credit.

Another core element of the AVID Program is the use of inquiry as a basis for instruction. Students use questions guided by Cornell note taking to help drive their learning. Inquiry based education is a catalyst for students to become problem solvers and higher order thinkers not students interested in regurgitating facts. Ultimately, students learn that questions should not be viewed as an example of what they do not know but, rather, as a vehicle with which to further develop their understanding and assessment of a particular topic or idea.

In the AVID program, collaboration also becomes a foundation for instruction. Students think aloud, discussing the curriculum and instruction. This teamwork helps draw on the support of peers and gives a voice to their thoughts. Thinking aloud helps students organize their ideas and improve

their understanding of complex subject matter. This teamwork helps empower all the students to achieve success.

Tutors are another important element of the success of the AVID program. "All the AVID teachers readily admitted that the tutors make AVID work" (Guthrie & Guthrie, 2002, p. 8). Not only do college students work with AVID students to help their knowledge and understanding of the advanced curriculum, but the tutors are role models. The tutors answer questions about college and university life. They demonstrate to the AVID students that university life can be achieved by any student willing to put forth the effort to obtain the goal.

The implementation of AVID and student progress must be monitored through the AVID Data System and analyzed for success. Consistent use of data must be on-going as a means of identifying the strengths and weaknesses of AVID and its students. Without the data, education can become a haphazard journey of the blind leading the blind. AVID demands results and the data is used for accountability and constant improvement.

Continuous commitment to resources and staff development at all levels of the program is critical for AVID success. Education is a political arena that faces a wide range of cost cutting. If districts are not committed to defending the expense of the staff development and the licensing of the AVID

program, schools can quickly lose the funds they need to maintain the program.

AVID must incorporate a strong interdisciplinary site team. This is often one of the most difficult essential faced by a school (Guthrie & Guthrie, 2002, p. 11). Schools undergo a great deal of turnover and a strong team may not last at a site. Also, AVID teams may become too close knit, thereby isolating themselves from the remaining faculty and staff.

Finally, the school must be committed to AVID and fully implement the elective class within the regular school day. From the strict adherence to Cornell note taking, the hiring and retention of tutors, and following the guidelines for admissions, all the elements must be followed. The elective is the backbone of support for the students. Each student is required to take upper level classes and the AVID elective helps provide the study skills, the preparation and the collaborative inquiry to assist students with the demands of a heavier class load. The elective also spends time teaching students about college enrollment including the application process, loans, grants, and test taking strategies.

However, Guthrie & Guthrie believe that three additional essentials should be added to the eleven essentials already in existence creating a "baker's dozen plus one". The first of these is a strong focus on math. The higher level math classes may create special obstacles and "math has become

the primary gatekeeper for admission to college" (Guthrie & Guthrie, 2002, p. 11). Students must begin in 9th grade with Algebra and continue for all four-year with sequential math classes. The schools must continue to hire and retain math teachers for AVID using the prescribed techniques and teaching strategies to promote success among the students.

Secondly, the school must continue to work on high quality staff development and continual use of the AVID Summer Institute and regional workshops. The consistent use of data by AVID programs throughout the country means that AVID has continual information to share and theories to promote for all AVID teachers. Without the regular staff development, AVID programs may fall behind without current knowledge of the latest pedagogical practices.

Finally, the site coordinator must be a highly respected, senior teacher with expert knowledge of college admissions and public relations. The demands of college acceptance grow more rigorous with every passing year. Grades, test scores, essays, extra-curricular activities and knowledge of the culture and climate of colleges and universities throughout the country play a big role in student acceptance. AVID site coordinators must be tuned-in to these areas of college admissions if they are to prepare their students to access American colleges and universities.

Research in California

In 2002, a study was conducted by Guthrie & Guthrie of the Center for Research, Evaluation and Training in Education (CREATE). *The Magnificent Eight:* AVID *Best Practice Study,* examined the success of the AVID Program in eight high schools in California. This study was conducted to evaluate the AVID Best Practices. "The purpose of the study was to assess the relative efficacy of the 11 AVID Program Essentials" (Guthrie & Guthrie, 2002, p. 3).

According to Guthrie and Guthrie (2002), the AVID students in the eight California high schools performed higher then their counterparts in several educational areas. The AVID students were more likely to attend A.P. classes, more likely to graduate from high school, more likely to apply for college and more likely to attend college than their non-AVID peers. One reason for the success is the strict adherence of the AVID guidelines. "The implementation of the program is complete. From the binder check to the tutorials, these programs are doing "AVID" (Guthrie & Guthrie, 2002, p. 6).

Research in Texas

From 1999-2002, the Austin Independent School District (AISD) conducted its own research regarding success of the AVID Program in its district. This study's findings, *The* AVID *Program in AISD, 1999-2002,* examined data from four middle schools and four high schools in the AISD that

incorporated the AVID Program as part of a district wide educational redesign. According to the study, all the major components of the AVID program were successful. The programs chose a majority of minority students for enrollment, along with a high rate of low SES students. While the distribution of participants by ethnicity differed across schools, some patterns emerged. In most schools, students participating were primarily of Hispanic origin (Oswald, 2002, p. 11). During the three year period the AVID Program grew dramatically from 185 students in 1999 to 436 students in 2002.

Most of the schools in the study enrolled larger number of girls than boys, 60% to 40%. There were several reasons for this disparity. First, students were required to decide for themselves if they want to be enrolled in the program and girls may be more interested in preparing for college. Also, girls may demonstrate the necessary behavioral characteristics like good attendance and fewer discipline problems (Oswald, 2002, p. 12).

In all eight schools the attendance rate for AVID students was approximately five percent higher than the general population. "AVID students as a group were more likely than other students to be in school on a daily basis" (Oswald, 2002, p. 10). Again, several factors may account for this fact. First, students in the AVID Program were required to attend school regularly. If not, they were withdrawn. Also, AVID offers a sense of belonging to its

students. The strong bonds created between the instructors and the AVID students helped promote higher attendance (Oswald, 2002 p. 13).

Enrollment in advanced courses, graduation rates, college applications and enrollment in college were all higher among AVID students than they were among general education students. "AVID students' academic performance on the TASS, End-of Course tests, and enrollment in advanced courses generally exceeds those of their classmates" (Oswald, 2002, p. 12). However, the study did find that failure rates in specific areas were larger among AVID students but attributed it to first year participants in the program. These students often had difficulty adjusting to the rigorous nature of the class work. However, after the first year, the students began to adapt to the AVID requirements and failures dropped significantly. All in all, the study found AVID to be a success. "By nearly any measure, responses to the program reflect that students are doing well and that both students and parents increasingly see the AVID participants as college-bound students" (Oswald, 2002, p. 12).

In 2003, researchers in Texas began to compare statistics of AVID and non-AVID students. In the article, AVID*: A Comprehensive School Reform Model for Texas,* Watt, Yanez and Cossio researched 26 Texas secondary schools to determine if AVID had expanded advanced coursework offerings, created a school-wide impact in culture and climate, improved achievement levels, and placed AVID students "on track" for college. The study used qualitative and

quantitative data collection and analysis beginning with baseline data in 1998 in the areas of grade point average (GPA), attendance, course enrollment, and test scores for over 1000 students. Also, 126 interviews were conducted with teachers, counselor and administrators. This project found widespread improvements in all areas of the research from GPA to standardized test scores. However, one area that was most interesting was termed the "AVIDization" of the schools. The researchers discovered that improvements in school-wide data were not simply limited to AVID students. Data showed that AVID teachers began to use many or most of the AVID Essentials in all their classes thereby impacting non-AVID students. These teachers also began recommending AVID strategies to other teachers who, in turn, used the strategies in their own classrooms. This school-wide impact or "AVIDization" created improved culture and climate for the overall school, not simply those students in the AVID program.

In the article, *Implications of One Comprehensive School Reform Model for Secondary School Students Underrepresented in Higher Education,* researchers from the University of Texas Pan American and the University of Texas at Austin studied the success of the AVID Program in 10 Texas high schools. This study spanned three years, from 1999-2002 and included 1,291 high school students enrolled in the AVID Program. Data was collected in several major areas starting with demographic information including ethnicity, gender, and

socioeconomic status. Attendance rates, standardized tests scores (TAAS), enrollment in A.P. classes and norm referenced test scores in algebra and biology were all examined. The study also examined the campus performance rating in 1999 prior to AVID implementation and three years later in 2002. The Texas Accountability Rating System rates campuses as *exemplary*, *recognized, acceptable* or *low performing*. To achieve an *exemplary* rating, 90% of the students and sub groups in each school must pass the reading, writing and math portions of the TAAS. The standard is 80% for *recognized*, 55% for *acceptable* and *low performing* with dropout rates determining the lower two categories. According to Watts, Powell & Mendiola (2004), AVID students in these schools made gains that far surpassed the other students. Attendance rates were higher for AVID students and their dropout rates were lower. Statewide, AVID students were more successful on exit exams and Advance Placement exams. This study "concluded that many interim measures point to clear successes of students enrolled in AVID" (Watts et al., 2004, p. 257). The AVID students were out performing other students in the school regardless of demographics, on passing rates, attendance, graduation rates and standardized test scores. Most importantly, all ten schools also improved their overall accountability rating, indicating another example of AVIDization.

In 2006, a study was conducted to determine whether selected Texas high schools that implemented AVID had shown improvements toward

preparing more underrepresented students for college as measured by a variety of ratings. In the article, *Schoolwide Impact and* AVID*: How Have Selected Texas Schools Addressed the New Accountability Measure?,* Watt, Powell, Mendiola and Cossio studied ten Texas high schools with the AVID program over a four year period. They used the state accountability rating as determined by the Texas Essential Knowledge and Skills (TEKS), schoolwide graduation and completion rates, enrollment in Advanced Placement (AP) courses, and AP test taking to compare AVID and non-AVID students.

First, researchers identified non-AVID schools in the same geographic area of Texas and the same general size as the school using the AVID program. Next the researchers examined the student population and the percentage of economically disadvantaged and ethnic minority to ensure that both the AVID and non-AVID schools were similar. Baseline data was collected in 1998 in the four accountability areas mentioned above. Four years later, in 2002, the same data was again collected and used to create descriptive statistics for comparison.

Based on the data collected, the researchers were able to address their primary question of college preparation of underrepresented students. First, the AVID schools in the study saw improvement in the areas of graduation, AP enrollment and AP test taking. However, non-AVID schools showed similar results in the same areas. Yet, in the area of the state accountability tests,

TEKS, seven AVID schools improved their rating while only two non-AVID schools witnessed improved rating. According to the authors, the AVID schools improved their overall performance profile during the four year period while the non-AVID schools did not. Furthermore, the authors stressed that further research is needed to conclude if the AVID program led to improved instructional capacity throughout the schools.

In an effort to meet the needs of least targeted, middle tier, predominate minority students, other programs similar to AVID have begun to flourish throughout the United States including GEAR-UP. In the article, *A Comparison Study of* AVID *and GEAR-UP 10th –Grade Students in Two High Schools in the Rio Grande Valley of Texas,* Watt, Huerta and Lozano (2007) examine the effectiveness of both the AVID and GEAR-Up programs in the areas of educational aspirations, expectations, anticipations, knowledge of college entrance requirements and financial aid, and academic achievement. A total of 142 10th grade students from two high schools in the Rio Grande Valley of Texas were studied: 40 in AVID, 40 in GEAR-UP, 22 in both and 40 in neither. Both qualitative and quantitative data was collected for this research project. The results of this study showed only a slight, but not statistically significant, difference between the four groups in all areas with the AVID students being minimally further ahead than their non-AVID counter parts. However, the

researchers are using this study as baseline data for additional studies when the students graduate from high school.

The School-wide Effects of AVID

Yet, the positive aspects of the AVID Program did not end with the AVID students. Guthrie and Guthrie discovered that schools that implement AVID also see a school wide AVID effect. This AVID effect translates into improved teaching and learning throughout all schools impacting the entire student body along with the members of AVID.

The first area of the AVID effect came in the expanded use of AVID teaching methodologies within the schools. For example, several schools in the study began to employ the use of the AVID style binder throughout the sites. These binders help students stay organized and prepared for class. The use of the binder limits the number of trips students take to their lockers for other folders or binders. This limited movement increases the likelihood that the AVID students will be punctual and prepared for class. Many schools also expanded their use of Cornell note taking and the use of tutors for all students. The Cornell notes not only help students organize their writing and their thoughts, but its uniform use throughout a school ensures improved classroom instruction. The expansion of the tutoring throughout the year allows all students to seek assistance with any subject matters during the year.

Another school-wide AVID effect that was observed in the study was improved outcomes and increased expectations for all students. This begins with Advanced Placement (A.P.) classes. At first, A.P. classes were offered only to AVID students. However, with the successful completion of these courses and excellent results on A.P. exams, more A.P. sections were opened throughout the school. Also, prejudice regarding the abilities of minorities began to wane. The success of Hispanic students created a new atmosphere in the schools and in the communities. "Across the campus and in the community, AVID has helped create a college-going culture in the Latino community" (Guthrie & Guthrie, 2002, p. 14). This can also transform an entire school culture. Success is contagious and as AVID students become college students, more teachers and students believe that goal can be attained by everyone. According to Guthrie and Guthrie (2002), AVID schools often become centers of lifelong learners that develop habits such as accountability, maturity, discipline, responsibility, collaboration, and determination.

Implementation Problems

In the article, *Tracking Untracking: Evaluating the Effectiveness of an Educational Innovation,* Mehan and Hubbard examine, from several perspectives, the complexities associated with implementing the AVID program. The research associated with this study lends itself to the understanding of the

complex variables facing educational leaders interested in the implementation of the AVID program. First, they investigated the idea that educational reforms, reforms driven by No Child Left Behind legislation, have many different points of origin. Some reform efforts are top-down reforms that come from the state government. Some reforms come from a district or school leader, while some reforms are grass roots like the school based creation of AVID by teacher Mary Swanson. Each reform model has its own strengths and weaknesses that influence the overall success of its implementation. Secondly, the article reviews the idea that reform is co-constructional process. The process of reform is not simple formulaic, technical implementation but it includes the commitment of both the teachers and the principal with the willingness to see the program flourish. Third, educational reforms are drastically influenced by the values and the perspectives of the participants. Those participants involved in a grass roots effort to create reform feel empowered by their involvement. However, if the reform is top-down, the participants often feel they are excluded from the decision making process and lack the inspiration to see the reform model succeed. Finally, Mehan and Hubbard argue that educational reforms are shaped by structure, culture and the educators that carry out the educational process on a daily basis. These factors can greatly influence and alter the fundamental nature of the reform model.

In 2007, implementation of AVID at the middle school level was discussed in the article *Pursuing Rigor at the Middle Level.* In this article, author Scott Lifvendahl examined four site based areas of concern for starting, developing and maintaining an AVID program. First, AVID requires a special elective and this elective, often offered to only two sections of students, creates difficulty when developing the master schedule. Second, AVID is founded on the basis of increased rigor and, at high school, this rigor is found in the Advanced Placement classes. However, at the middle school level the AP classes are not available and thus the curriculum may not provide for rigorous standards. Third, mathematics has become a course that is offered in a variety of levels from intensive math to Algebra II and this diversity poses an additional problem with the scheduling of all the AVID students as they must be scheduled together in their classes throughout the day. Finally, those teachers involved in the AVID program are not compensated additionally for the increased workload and often many teachers decline the offer to be part of AVID. Needless to say, the creation of an AVID program can produce many hurdles at the site based level.

In the article *Leadership and* AVID *Implementation Levels in Four South Texas Border Schools*, researchers from the University of Texas Pan American studied AVID regarding school leadership and program implementation in four South Texas border schools in 1999. All four schools were in the same district

and all were located 15 miles from the U.S-Mexico border. Of the 305 students in the study, approximately 95% were Hispanic, 85% were economically disadvantaged, and 30% were second language learners. The researchers used the 11 AVID Essentials as the key markers to evaluate the school leadership and the success of the implementation of the AVID Program. Through the use of attendance rates, graduation rates, standardized test scores, administrator surveys, teacher and student surveys, and the Texas school rating system, the researchers analyzed the success of the programs in the schools based on the school leadership. This study found that the support of the school's leadership, not the program itself, determined the success or failure of the implementation. "Supportive and involved principals led to the successful AVID implementation efforts in the district study" (Watt et. al. 2004, p. 13). This study highlights a concept not included on the Guthrie and Guthrie *Essential 11*, school-wide leadership support.

In their work, *Scaling Up an Untracking Program: A Co-Constructed Process*, Hubbard and Mehan also studied the AVID Program in the state of Kentucky. The study looked at the ways in which the scaling up of a program can become a co-construction process. This study examined the difficulties that arose when programs are implemented either from the top-down or from the bottom-up.

In 1989, the Kentucky Supreme Court ruled that the state's revenue system was unequal. The educational system was declared unconstitutional because of the inequities between rich and poor districts. Students in poor areas were not offered an education equal to that of their more affluent counterparts (Hubbard & Mehan, 1999, p. 88). In response to the courts decision, the state legislature passed the Kentucky Education Reform Act (KERA) which created a complete overhaul of the educational system. KERA increased state funding for education and created more power at the local levels by reintroducing site based decision making (SBDM). The state introduced standardized tests and included a scoring system that rewarded high achieving schools with additional funds and penalizing poorly performing schools. During this period, Kentucky lawmakers also selected Dr. Thomas Boysen, the former superintendent of schools for San Diego County, and appointed him Commissioner of the State Department of Education in Kentucky. Along with Dr. Boysen came the California educational success story known as AVID. Within five years, thirty secondary schools in Kentucky implemented AVID. However, unlike San Diego, the Kentucky implementation of AVID was a top down model, not a grass roots movement started by one teacher that spread throughout the state. This top-down implementation created a variety of difficult situations at the local level.

While AVID maintained the support of many educators, the direct application procedure did not always include the input of all stakeholders in the educational system. Some district superintendents were not included in the decision to adopt AVID and did not always support the program (Hubbard & Mehan, 1999, p. 90). This lack of buy-in can jeopardize a program that may need local funds for its success.

While the funds where available at the local level and political support was in place at the upper level, the mid-level implementation of AVID faced dramatic difficulties. First, one state AVID coordinator and two part time assistants were expected to assist all sites, many of which were a five hour drive apart. Also, the coordinator was expected to serve as public relations representative, plan and organize professional development and act as liaison among the schools, the state Department of Education and the AVID Center (Hubbard & Mehan, 1999, p. 91). The complexities and demands of the program hampered the growth of AVID at the school sites.

AVID is a franchised product that must be implemented fully at each site or the "license" is subject to withdrawal. One of the essential features of the program is the use of the AVID tutors, college students working with secondary students at the sites to improve the educational process. However, several areas of Kentucky are remote, often six hours from the nearest college or

university. To compensate for this, lead teachers at the secondary level used high school seniors to help adjust to the challenge.

Scheduling the AVID elective was difficult in many areas of Kentucky. AVID schools must provide the elective two days a week for instruction, two days for tutoring and one day for field trips or motivational speakers. However, many Kentucky school were using block scheduling and no flex time to meet the constraints of the AVID elective requirements. Therefore, according to Hubbard and Mehan (1999), schools in Kentucky, to the dismay of AVID, created time before and after school to meet and fulfill many of the valuable requirements of the elective.

Many schools experienced difficulties finding teachers willing to take on the new program with extra work and professional development. Teachers were often "forced" into AVID and were not dedicated to the proper implementation of the program. Also, the AVID Program was designed to meet the needs of largely Hispanic population in California. In Kentucky many of the students who fit the AVID profile were white students from working class backgrounds. Kentucky teachers felt the professional development and trips to California were time consuming, expensive and not applicable for their sites.

Ultimately, while the implementation of the AVID program in Kentucky was top-down, the decisions at the district and the site level created a co-constructional model of implementation. This co-construction demonstrates

the ways in which programs, like AVID, in spite of their best efforts, often tend to morph into altered forms to meet the needs of schools and students at the local level.

The research relating to AVID highlights several critical areas of study. First, all schools should be using current data to study the inequities among students of diverse ethnic and cultural backgrounds. Secondly, school districts should be moving away from the idea of remediation. Struggling students should continue to face rigorous standards and schools must implement systems of support to meet their needs. Lastly, programs like AVID must have the flexibility to meet the constraints of local districts and school sites.

AVID Success Rates

Ultimately, the results speak for themselves. In the San Diego City Schools (SDCS), a 1999 study showed that 48% of the students who completed 3 years of AVID enrolled in four year colleges. This far exceeded the SDCS average of 37% and the national average of 39%. For Latino students, the AVID students enrolled in a four-year college at a 43% rate compared to the national average of 29%. Finally, for African-Americans the numbers were 55% enrollment and 33% enrollment for AVID students and non-AVID students respectively (Hubbard & Mehan, p. 84).

Since 1990, nearly 40,000 AVID students have graduated from high school and gone on to college (avidonline.org). Ninety-four percent of AVID students report enrolling in college including 77% in four year universities. This compares to a national average of 35% of high school graduates attending four year colleges and universities (Muir, 2006, p.2). According to avidonline.org, in the 2008-2009 school-year, AVID is in over 4,000 schools nationally and throughout the world and seventy-eight percent of 2008 AVID graduates were accepted to a four-year college. The proportion of Latinos taking AP exams is almost five times higher among AVID students than among U.S. students overall. AVID students complete university entrance requirements at a much higher rate than their non-AVID peers (CA=85%, TX=91% & NA=34%). These statistics demonstrate the results of AVID and highlights the motivation for the growth of the program including its expansion into the state of Florida.

Background on Florida Comprehensive Assessment Test (FCAT)

The Florida Comprehensive Assessment Test (FCAT) is a criterion-referenced test, first administered to students in Florida in 1998. The test was designed to measure individual achievement of the Florida curriculum standards, the Sunshine State Standards (SSS). These standards were adopted in 1996 with the expectations all teachers would teach these standards.

All middle school students are tested in two main areas, math and reading. In addition, 8th grade students are also tested in science and writing. The majority of the questions are multiple-choice with four answer options. The FCAT also includes both short answer and extended response questions, particularly for the 8th grade students. Finally, the FCAT Writing test is essay only, with half of the students responding in an expository essay and half the students responding in a persuasive essay. These essays are scored on the basis of 0-6 based on the scores of three separate evaluators.

The results of the FCAT are separated into eight main areas, as follows; percentage of students meeting high standards in math, percentage of students meeting high standards in reading, percentage of students meeting high standards in writing, the percentage of students meeting high standards in science, percentage of students making learning gains in reading, the percentage of students making learning gains in math, the percentage of lowest quartile making learning gains in math, and percentage of lowest quartile making learning gains in reading. The total number of points earned in each of these areas is accumulated to create and overall score. The overall score is used to determine the school grade, ranging from A-F. The grades are determined as follows;

A=>524 B=524-495 C=494-434 D=433-395 F=<395

Summary

This chapter has been used to present a review of literature and related research. The review was prepared to address the review of tracking programs, historical background of AVID, the major components of AVID, major research conducted on AVID programs in Texas and California, pitfalls associated with implementing AVID and a background on the Florida Comprehensive Assessment Test (FCAT). Chapter 3 reviews the methodology of the study. Chapter 4 will present an analysis of the data. Finally, Chapter 5 contains a summary and discussion of the finding, implications of the study and recommendations for future studies.

CHAPTER 3:
METHODOLOGY

Introduction

This chapter contains the procedures and methods used to conduct the study. Detailed information regarding the sampling method, data collection, instrumentation, research questions and hypotheses are presented. This study called for the investigation of 264 middle schools in eleven Florida county schools districts. Of the 264 schools, 85 of the schools have implemented AVID into the school while 179 schools did not have AVID. Each school was to be measured using the FCAT scores in Reading, Math and total FCAT points along with attendance rates and disciplinary incidents.

Population and Sample

The treatment group was the 85 middle schools with the AVID program during the 2007-2008 school-year within all eleven Florida county school districts. The control group was the 179 non-AVID middle schools during 2007-2008 school-year within all eleven counties. The first area of the study examined the percentage of students who scored a Level 3 or above on the math portion of FCAT. The second area of the study examined the percentage of students who scored a Level 3 or above on the reading portion of FCAT. The third area of the study examined the total number of points obtained by the school in all eight areas of the FCAT exam. This point total determines the

overall *FCAT School Grade of A-F* (see Appendix C). Fourth, the study examined the mean number of students with 21+ days of absences reported to the State of Florida for all the middle schools in the eleven county school districts. The fifth area of the study examined the number of serious disciplinary incidents reported to the State of Florida from each of the middle schools in the eleven county schools districts. Finally, this study compared the total FCAT points of AVID school with non-AVID schools while controlling for several factors. All the schools in Research Question #6 had at least 900 students, will have a minority population of at least 40%, a free/reduced population of at least 50%, and the AVID schools will have at least 5% of the population enrolled in the AVID program.

Data Collection Procedures

The information regarding the FCAT math scores, reading scores and total FCAT points for all 264 AVID schools in each of the eleven Florida county school districts was obtained from the Florida Department of Education (FLDOE) website. This information, along with free and reduced lunch, minority rates, and the student membership were all found in the *School Indicator Reports* and can be found in the Appendixes. The data regarding attendance rates and disciplinary incidences can also be found on the FLDOE website and can be found in the Appendixes.

Instrumentation

The Florida Comprehensive Assessment Test (FCAT) is a criterion-referenced reading test, first administered to students in Florida in 1998. The test was designed to measure individual achievement of the Florida curriculum standards, the Sunshine State Standards (SSS). These standards were adopted in 1996 with the expectations all teachers would teach to these standards.

All middle school students are tested in two main areas, math and reading. In addition, 8th grade students are also tested in science and writing. The majority of the questions are multiple-choice with four answer options. The FCAT also includes both short answer and extended response questions, particularly for the 8th grade students. Finally, the FCAT Writing test is essay only, with half of the students responding in an expository essay and half the students responding in a persuasive essay. These essays are scored on the basis of 0-6 based on the scores of three separate evaluators.

The results of the FCAT are separated into eight main areas, as follows; Percentage of students meeting high standards in math, percentage of students meeting high standards in reading, percentage of students meeting high standards in writing, the percentage of students meeting high standards in science, percentage of students making learning gains in reading, the percentage of students making learning gains in math, the percentage of lowest

quartile making learning gains in math, and percentage of lowest quartile making learning gains in reading. The total number of points earned in each of these areas is accumulated to create an overall score. The overall score is used to determine the school grade, ranging from A-F.

Instrumentation Validity and Reliability

The internal consistency reliabilities for the FCAT are reported using two methods: Cronabch's Alpha and the Item Response Theory (IRT) marginal reliabilities. Cronbach's Alpha coefficients are reported for the FCAT-SSS tests and for the FCAT-NRT (KR-20 is used) found in Table 1. The Cronbach's Alpha is the most appropriate statistic because the majority of the questions on the FCAT are scored on a scale from 0-4.

Table 1 shows FCAT reliability coefficients using Cronbach's Alpha for the FCAT-SSS as reported by the test publisher. This data confirms that the FCAT is highly reliable test for assessing the educational achievement of students in the State of Florida.

TABLE 1

Figure 1: CLASSICAL RELIABILITY OF FCAT

TABLE 2 IRT MARGINAL (R_{μ}) RELIABILITY OF FCAT READING					MATHEMATICS			
	Cronbach's Alpha – SSS			KR-20	Cronbach's Alpha - SSS			KR-20
	2001	**2002**	**2003**	**NRT_1**	**2001**	**2002**	**2003**	**NRT_1**
3	.91	.91	.91	.94	.89	.89	.88	.90
4	.90	.90	.90	.93	.89	.89	.88	.90
5	.88	.87	.90	.93	.92	.92	.92	.90
6	.91	.89	.89	.92	.87	.88	.87	.90
7	.92	.91	.91	.93	.90	.88	.89	.90
8	.90	.89	.89	.94	.92	.93	.93	.91
9	.91	.87	.89	.94	.92	.91	.89	.87
10	.89	.88	.88	.93	.93	.92	.92	.88

Research Questions

1. What is the difference, if any, in the mean FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

2. What is the difference, if any, in the mean FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

3. What is the difference, if any, in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

4. What is the difference, if any, in mean attendance rates for students who with 21+ days of absences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

5. What is the difference, if any, in mean number of disciplinary incidents in the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

6. What is the difference, if any, in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts when the research controlled for population size, minority and free/reduced lunch percentage and percentage of AVID students?

Procedures

This study examines 264 middle schools from 11 Florida county school districts. Of the 264 schools, 85 schools used the AVID program during 2007-2008 school-year. The remaining 179 middle schools did not have the AVID program.

The data for the 2007-2008 FCAT was obtained from the Florida Department of Education website, www.FLDOE.org. The data regarding

attendance rates and disciplinary incidences were also obtained from the Florida Department of Education website. The attendance rates were part of the *School Reports* and the disciplinary data was included in the School Environmental Safety Incident Reports (SESIR). The data relating to AVID was obtained via www.avidonline.org.

The computer program, SPSS version 15.0 for windows, was used for computing and analyzing the data. There were five independent variables and one dependent variable in the study. The dependent variables were the AVID and non-AVID schools. The independent variable were the percentage of students who scored a Level 3 or above in math or reading, the total points accumulated by each school, attendance rates and disciplinary incidents reported to the State of Florida. For all six research questions, the dependent variable was included along with one of the five independent variables.

The descriptive statistics for all six research questions included frequency distributions and boxplots. The measures of central tendency test were the mean and the median. The tests for variability include the range, standard deviation, and variance.

For Research Question 1, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean reading FCAT scores, Level 3 and above, for the AVID schools and the mean FCAT reading scores, Level 3 and above, for the non-AVID schools.

For Research Question 2, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean math FCAT scores, Level 3 and above, for the AVID schools and the mean math FCAT scores, Level 3 and above, for the non-AVID schools.

For Research Question 3, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean total points scored for the AVID schools and the mean total FCAT points scored for the non-AVID schools.

For Research Question 4, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean percentage of the student population who were absent 20+ days for the AVID schools and the mean total points scored percentage of the student population who were absent 20+ days for the non-AVID schools.

For Research Question 5, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean number of disciplinary incidences reported to the State of Florida for

the AVID schools and the mean number of disciplinary incidences reported to the State of Florida for the non-AVID schools.

For Research Question 6, the dependent variable had two levels, AVID and non-AVID schools. The independent variable had two groups which were the mean total points scored for the AVID schools and the mean total FCAT points scored for the non-AVID schools. However, for this question, the data was controlled to create population sizes, minority rates and rates of students on free/reduced lunch. Also, the data controlled for percentage of AVID students. For this question, 136 schools were examined with 91 non-AVID school and 45 schools with the AVID program.

Summary

This chapter presented the methods and procedures used in conducting the study comparing 264 middle schools in 11 Florida county school district in five separate areas including FCAT scores, attendance rates and disciplinary incidences. Of the 264 schools, 85 schools use the AVID program while 179 are non-AVID schools. This chapter contains the population, the sampling method, data collection procedures, the instrumentation, the procedures for the study, and the research questions.

CHAPTER 4:
ANALYSIS OF DATA

Introduction

Chapter 4 provides a profile of the middle schools in the study and the data analysis relevant to the six research questions included in this study. The results of the study are included and represented by the accompanying tables. The conclusions, implications for practice, and recommendations for future research are discussed in Chapter 5.

The purpose of this study was to determine if "AVIDization" occurred at middle schools in 11 Florida county school districts as compared to the middle schools in those districts that did not have AVID. This study used the FCAT results in the areas of math, reading, total FCAT points, also student attendance rates, and rates of disciplinary incidents as a comparison. Six research questions were used to guide the data analysis. Included in this chapter are the findings of the statistical tests conducted to answer the research questions.

Research Questions

Research Question 1

What is the difference in the mean FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

The mean FCAT reading score for the students in the AVID middle school was 60.8 while the mean FCAT reading score for the students in the non-AVID schools was 65.7. The median reading score in the AVID schools was 62 while the non-AVID median score was 67. The range in the AVID schools was wider at 71 compared to 54 in the non-AVID schools. The variance for the AVID schools was 206.2 while the variance for the non-AVID schools was 193.3. The standard deviation for the AVID schools was 13.4 while the standard deviation for the non-AVID schools was 13.9. Therefore, the AVID schools' mean FCAT scores were, on average, further from the mean with greater variability compared to the mean scores of the non-AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in the mean FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts. The test was significant, $t(262)= -2.67$, $p=.01$. Students in AVID schools ($M=60.8$, $SD=14.4$) scored lower then students in non-AVID school ($M=65.7$, $SD=13.9$). The 95% confidence interval for the difference in the mean was narrow, ranging from -8.58 to -1.29

Figure 2: Research Question 1

Group Statistics

	AVID	N	Mean	Std. Deviation	Std. Error Mean
FCATRd	AVID	85	60.79	14.359	1.557
	non-AVID	179	65.73	13.904	1.039

Figure 3: Research Question 1

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FCATRd	Equal variances assumed	.299	.585	-2.668	262	.008	-4.938	1.851	-8.583	-1.293
	Equal variances not assumed			-2.637	160.436	.009	-4.938	1.872	-8.636	-1.240

Figure 4: Research Question 1

Report

FCATRd

AVID	N	Median	Range	Variance
AVID	85	62.00	54	206.193
non-AVID	179	67.00	71	193.312
Total	264	65.00	71	202.035

Research Question 2

What is the difference in the mean FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

The mean FCAT math score for the students in the AVID middle schools was 61.5 while the mean FCAT reading score for the students in the non-AVID schools was 65.6. The median score for the AVID schools was 61 while the non-AVID schools had a median score of 65. The range in the scores for the AVID school was, 61, and the non-AVID schools at 70. The variance for the non-AVID schools was, 221.1, compared to the AVID schools at 243.3. The standard deviation for the AVID schools was 15.6 while the standard deviation for the non-AVID schools was 14.9. Therefore, the AVID schools mean FCAT to be on average further from the mean with greater variability compared to the mean scores of the non-AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in the mean FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts. The test was significant, $t(262)=2.03$, $p=.04$. Students in AVID schools ($M=61.5$, $SD=15.6$) scored lower then students in non-AVID school ($M=65.6$, $SD=14.9$). The 95% confidence interval for the difference in the mean was narrow, ranging from -7.97 to -.129.

Figure 5: Research Question 2

Group Statistics

	AVID	N	Mean	Std. Deviation	Std. Error Mean
FCATMth	AVID	85	61.52	15.597	1.692
	non-AVID	179	65.56	14.870	1.111

Figure 6: Research Question 2

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FCATMth	Equal variances assumed	.590	.443	-2.033	262	.043	-4.047	1.990	-7.965	-.128
	Equal variances not assumed			-1.999	158.249	.047	-4.047	2.024	-8.045	-.049

Figure 7: Research Question 2

Report

FCATMth

AVID	N	Median	Range	Variance
AVID	85	61.00	61	243.276
non-AVID	179	65.00	70	221.124
Total	264	64.00	70	230.947

Research Question 3

What is the difference in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

The mean total FCAT score for the AVID middle schools was 521.2 while the mean total FCAT score for the non-AVID schools was 538.5. The median score for the AVID schools was 515 compared to the median score of 536 for the non-AVID schools. The range for the AVID schools was 228 compared to 324 of the non-AVID schools. The variance of the non-AVID schools was longer at 3640.7 compared to 3518.3 by the AVID schools. The standard deviation for the AVID schools was 59.3 while the standard deviation for the non-AVID schools was 60.3. Therefore, the AVID schools mean total FCAT scores were on average further from the mean with greater variability compared to the mean scores of the non-AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in the mean total FCAT points earned during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts. The test was significant, $t(262)=-2.2$, $p=.03$. AVID schools ($M=521.2$, $SD=59.3$) scored lower non-AVID school ($M=538.5$, $SD=60.3$). The 95% confidence interval for the difference in the mean was wide, ranging from -32.9 to -1.7

Figure 8: Research Question 3

Group Statistics

	AVID	N	Mean	Std. Deviation	Std. Error Mean
FCATScr	AVID	85	521.18	59.315	6.434
	non-AVID	179	538.52	60.338	4.510

Figure 9: Research Question 3

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FCATScr	Equal variances assumed	.156	.694	-2.194	262	.029	-17.343	7.905	-32.909	-1.778
	Equal variances not assumed			-2.207	167.723	.029	-17.343	7.857	-32.854	-1.832

Figure 10: Research Question 3

Report

FCATScr

AVID	N	Median	Range	Variance
AVID	85	515.00	228	3518.290
non-AVID	179	536.00	324	3640.689
Total	264	532.50	324	3653.665

Research Question 4

What is the difference, if any, in mean attendance rates for students with 21+ days of absences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

The mean attendance rates for students with 21+ days of absences in the AVID middle schools was 11.5 while the mean attendance rates for students with 21+ days of absences in the non-AVID schools was 8.7. The median score for attendance rates for students who with 21+ days was 10.4 compared to the median score of 7.6 for the non-AVID schools. The range for the AVID school was 27.7 compared to the range of 30.3 for the non-AVID schools. The variance for the AVID schools was 35.6 and the variance for non-AVID was 28.8. The standard deviation for the AVID schools was 6.0 while the standard deviation for the non-AVID schools was 5.3. Therefore, the AVID schools mean attendance on average was further from the mean compared to the mean score of the non-AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in the attendance rates during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts. The test was significant, $t(262)= 3.84$, $p=.00$. Students in AVID schools ($M=11.5$, $SD=6$) recorded more students with 21+ days of absences

than in non-AVID schools (M=8.67, SD=5.3). The 95% confidence interval for the difference in the mean was narrow, narrow from 1.26 to 4.24

Figure 11: Research Question 4

Group Statistics

	AVID	N	Mean	Std. Deviation	Std. Error Mean
Attendance	AVID	85	11.4624	5.96354	.64684
	non-AVID	179	8.6620	5.32703	.39816

Figure 12: Research Question 4

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Attendance	Equal variances assumed	1.635	.202	3.838	262	.000	2.80034	.72963	1.36366	4.23703
	Equal variances not assumed			3.687	149.581	.000	2.80034	.75956	1.29949	4.30119

Figure 13: Research Question 4

Report

Attendance

AVID	N	Median	Range	Variance
AVID	85	10.4000	27.70	35.564
non-AVID	179	7.6000	30.30	28.377
Total	264	8.7500	30.30	32.283

Research Question 5

What is the difference in the mean disciplinary incidents in the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

The mean number of disciplinary incidents for the AVID middle school was 73.1 while the mean number of disciplinary incidents in the non-AVID schools was 78.2. The median score for the AVID schools was 60 compared to 58 of the non-AVID schools. The range of the non-AVID schools was 312 compared to the non-AVID schools at 407. The variance for the non-AVID schools was 5697.3 versus the variance of the AVID schools at 3924.1. The standard deviation for the AVID schools was 62.6 75.5 while the standard deviation for the non-AVID schools was 13.9. Therefore, the AVID schools mean FCAT to be on average further from the mean with greater variability compared to the mean scores of the non-AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in disciplinary incidences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts. The test was not significant, $t(262)= -.54$, $p=.59$. AVID schools ($M=73.1$, $SD=62.6$) reported fewer disciplinary incidents then non-AVID schools ($M=78.2$, $SD=75.5$). The 95% confidence interval for the difference in the mean was wide, ranging from 23.69 to 13.46.

Figure 14: Research Question 5

Group Statistics

	AVID	N	Mean	Std. Deviation	Std. Error Mean
Discipline	AVID	85	73.1059	62.64298	6.79459
	non-AVID	179	78.2179	75.48028	5.64166

Figure 15: Research Question 5

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Discipline	Equal variances assumed	.952	.330	-.542	262	.588	-5.11199	9.43351	-23.68714	13.46315
	Equal variances not assumed			-.579	195.825	.563	-5.11199	8.83146	-22.52898	12.30499

Figure 16: Research Question 5

Report

Discipline

AVID	N	Median	Range	Variance
AVID	85	60.0000	312.00	3924.143
non-AVID	179	58.0000	407.00	5697.272
Total	264	58.5000	407.00	5115.014

Research Question 6

What is the difference in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools when population size, minority percentage, free/reduced lunch percentage and percent of AVID students are held constant?

The mean total FCAT score for the AVID middle schools was 489.8 while the mean total FCAT score for the non-AVID schools was 511.2. The median score for the AVID schools was 482 compared to the median score of 520 for the non-AVID schools. The range for the AVID schools was 168 compared to the 268 of the non-AVID schools. The variance of the non-AVID schools was wider at 2363.7 compared to 1733.5 of the AVID schools. The standard deviation for the AVID schools was 41.6 while the standard deviation for the non-AVID schools was 48.6. Therefore, the non-AVID schools mean total FCAT scores were on average further from the mean with greater variability compared to the mean scores of the AVID schools.

An independent t-test was conducted to evaluate the hypothesis that there is no difference in the mean total FCAT points earned during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts when the data was controlled for population size, minority rates, percentage of students on free/reduced lunch and the percent of AVID students. The test was significant, $t(134)=-2.53$, $p=.01$. AVID schools ($M=489.8$, $SD=41.6$) scored lower non-AVID school ($M=511.2$, $SD=48.6$). The

95% confidence interval for the difference in the mean was wide, ranging from-38.1 to -4.7.

Figure 17: Research Question 6

Group Statistics

	avid2	N	Mean	Std. Deviation	Std. Error Mean
FCATScr	avid	45	489.82	41.635	6.207
	nonavid	91	511.23	48.618	5.097

Figure 18: Research Question 6

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FCATScr	Equal variances assumed	.794	.374	-2.530	134	.013	-21.409	8.463	-38.148	-4.670
	Equal variances not assumed			-2.666	100.912	.009	-21.409	8.031	-37.340	-5.477

Figure 19: Research Question 6

Report

FCATScr

avid2	N	Median	Range	Variance
avid	45	482.00	168	1733.468
nonavid	91	520.00	268	2363.691
Total	136	505.50	268	2243.000

CHAPTER 5:
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to compare middle schools with Advancement Via Individual Determination (AVID) to non-AVID schools in 11 Florida county school districts. The comparisons were made using data from three areas of the Florida Comprehensive Assessment Test; Math, Reading, and total points, along with attendance data and data reflecting disciplinary incidences. The data was collected from the Florida Department of Education website FLDOE.org.

Summary and Discussion of Findings

The present study added to the body of research on the level of achievement of two groups of middle schools. Based on the FCAT data, and data on discipline and attendance, it was found that there was a statistical difference between AVID and non-AVID middle schools in 11 Florida county school districts in regards to student performance on the FCAT Reading, FCAT Math, total FCAT points, students attendance rates, and the number of disciplinary incidences.

This study was formed by six research questions. A summary and discussion of the findings for each question are presented in this chapter. Also included in this chapter are a conclusion, implications for practice and recommendations for future research.

Research Question 1

What is the difference, if any, in the FCAT scores, Level 3 or above, in reading during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

A comparison of the 85 AVID middle schools and the 179 non-AVID middle schools 2007-2008 FCAT scores in reading were examined and found to have statistically significance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a five point difference for the FCAT mean reading score of Level 3 and above. The frequency table and the boxplot showed the greatest margins of difference with an 80 point difference among the schools in the study when comparing the highest scoring non-AVID school and the lowest scoring AVID school.

The comparison suggests that a larger percentage of students in non-AVID schools scored a Level 3 or above on FCAT Reading then students in AVID schools. Therefore, this study did not demonstrate that "AVIDization" occurred at AVID schools to the degree that the AVID schools outperformed non-AVID schools in the area of FCAT reading.

Research Question 2

What is the difference, if any, in the FCAT scores, Level 3 or above, in math during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

A comparison of the 85 AVID middle schools and the 179 non-AVID middle schools 2007-2008 FCAT scores in math were examined and found to have statistically significance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a four point difference for the FCAT mean math score of Level 3 and above. The frequency table and the boxplot showed the greatest margins of difference with an 80 point difference among the schools in the study when comparing the highest scoring non-AVID school and the lowest scoring AVID school.

The comparison suggests that a larger percentage of students in non-AVID schools scored a Level 3 or above on FCAT Math then students in AVID schools. Therefore, this study did not demonstrate that "AVIDization" occurred at AVID schools to the degree that the AVID schools outperformed non-AVID schools in the area of FCAT math.

Research Question 3

What is the difference, if any, in the total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

A comparison of the 85 AVID middle schools and the 179 non-AVID middle schools 2007-2008 FCAT score were examined and found to have statistically significance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a 17 point difference for the total FCAT scores. The frequency table and the boxplot showed the greatest margins of difference with a 240 point difference among the schools in the study when comparing the highest scoring non-AVID school and the lowest scoring AVID school.

The comparison suggests that non-AVID schools scored higher than AVID schools on the FCAT. Therefore, this study did not demonstrate that "AVIDization" occurred at AVID schools to the degree that the AVID schools outperformed non-AVID schools in the area of total FCAT points.

Research Question 4

What is the difference, if any, in mean attendance rates for students who with 21+ days of absences during the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida county school districts?

A comparison of the 85 AVID middle schools and the 179 non-AVID middle schools 2007-2008 in mean attendance rates for students who with 21+ days of absences found to have statistically significance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a four point difference for the in mean attendance rates for students who with 21+ days of absences. The frequency table and the boxplot showed the greatest margins of difference with a 22 point difference among the schools in the study when comparing the highest scoring AVID school and the lowest scoring non-AVID school.

The comparison suggests that a larger percentage of students in AVID schools missed 21+ days or more then students in non-AVID schools. Therefore, this study did not demonstrate that "AVIDization" occurred at AVID schools to the degree that the AVID schools had a lower attendance rates for students who with 21+ days of absences

Research Question 5

What is the difference, if any, in disciplinary incidents in the 2007-2008 school-year between AVID and non-AVID schools within all eleven Florida counties?

A comparison of the 85 AVID middle schools and the 179 non-AVID middle schools 2007-2008 disciplinary incidents examined and found to have statistically insignificance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a five point difference. The frequency table and the boxplot showed the greatest margins of difference with a 250 point difference in the study when comparing the highest scoring non-AVID school and the lowest scoring AVID school.

Therefore, because the results were statistically insignificant, this study cannot determine if "AVIDization" occurred at AVID schools with regards to major disciplinary incidents.

Research Question 6

What is the difference in the mean total FCAT points during the 2007-2008 school-year between AVID and non-AVID schools when population size, minority percentage, and free/reduced lunch percentage are held constant?

A comparison of the 45 AVID middle schools and the 91 non-AVID middle schools 2007-2008 FCAT score were examined and found to have statistically significance using an independent t-test.

The mean descriptive test demonstrated that a difference for the AVID schools and the non-AVID schools with a 22 point difference for the total FCAT scores. The frequency table and the boxplot showed the greatest margins of difference with a 185 point difference among the schools in the study when comparing the highest scoring non-AVID school and the lowest scoring AVID school.

The comparison suggests that, while controlling for population size, minority rates, and the percentage of students on free/reduced lunch and the percentage of AVID students, non-AVID schools scored higher then AVID schools on the FCAT. Therefore, this study did not demonstrate that "AVIDization" occurred at AVID schools to the degree that the AVID schools outperformed non-AVID schools in the area of total FCAT points when controlling for several factors.

Conclusions

This study investigated the comparison of AVID middle schools to non-AVID middle school in 11 Florida county school districts. The study used the Florida Comprehensive Assessment Test along with data on attendance and disciplinary incidents to determine if AVIDization occurred at AVID schools. The review of literature examined several studies in Texas that demonstrated that AVIDization occurred in several AVID high schools. However, no studies have been published to determine if AVIDization occurs in middle school, nor have studies been published to investigating AVID programs in middle schools in Florida. Based on the data collected from the Florida Department of Education along with data from the AVID Center, the following conclusions were made:

1. Non-AVID school outperformed AVID schools in all areas of the Florida Comprehensive Assessment Test. However, these significant levels were minor which demonstrated that the non-AVID schools only slightly outperformed AVID schools.

2. Non-AVID schools reported fewer students who missed 21+ days of school then AVID schools. Again, the significance level were low, however, students in non-AVID did have lower chronic absenteeism.

3. The non-AVID schools outperformed AVID schools on total FCAT points when the data was controlled for population size, minority population, the percentage of students on free/reduced lunch and percentage of students enrolled in the AVID program.

Implications for Practice

As demonstrated by the review of literature, the No Child Left Behind legislation has placed greater emphasis on standardized tests as a means of evaluating school success. In turn, secondary schools continue to search for ways to increase test scores while also increasing graduation rates. Florida ranks fourth in population among all states, and therefore, has one of the largest populations of school aged students of all 50 states. Florida county school districts will need to continue to adopt a wide range of strategies to improve student success. Through this study, the following recommendations can be made.

1. In developing and implementing new programs to create students success, it is important to remember that one program may not be able to change the culture and climate of an entire school.
2. Secondary schools, regardless of their demographic population, must implement several programs to meet the diverse needs of all students. Seldom will one program meet the needs of all students.

3. When evaluating student achievement and school success, administrators and district leaders must not focus solely on test scores. Educational leaders must also focus on other indicators such as disciplinary incidences and attendance rates as a mean evaluating culture and climate.

Recommendations for Future Research

Based on the conclusions of this study, the following are recommendations for future research:

1. To conduct a longitudinal study that only researches AVID schools to determine if the schools improve after they have added the AVID program.

2. To continue this over several years, not only one, to determine "AVIDization" occurs.

APPENDIX
INSTITUTIONAL REVIEW BOARD APPROVAL

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Not Human Subjects Research / Not Research

From : **UCF Institutional Review Board**
FWA00000351, Exp. 10/8/11, IRB00001138

To : **Scott H. Lifvendahl**

Date : **April 22, 2009**

IRB Number: **SBE-09-06235**

Study Title: **A COMPARISON STUDY OF FLORIDA MIDDLE SCHOOLS WITH ADVANCEMENT VIA INDIVIDUAL DETERMINATION (AVID) AND NON-AVID MIDDLE SCHOOLS**

Dear Researcher:

After reviewing the materials that you have submitted, the UCF Institutional Review Board has determined that your project does not fit the definition of human subjects research because the data will be collected from a public web site and the data cannot be traced to an individual.

Therefore, IRB review is not needed.

Thank you for your time in resolving this issue. Please continue to submit applications that involve human subject activities that could potentially involve human subjects as research participants.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 04/22/2009 12:09:47 PM EDT

Joanne Muratori

IRB Coordinator

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