Mary Catherine Swanson

Founder & Executive Director
AVID Center
(Advancement Via Individual Determination)

Nominated by

Joseph F. Johnson, Jr.

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NCUST
National Center for Urban School Transformation

SAN DIEGO STATE UNIVERSITY

August 1, 2008

Brock International Prize in Education Jurors

Dear Brock Jurors:

Many individuals have made remarkable contributions to education and deserve consideration for this prestigious award. My work at the local, state, and national level has provided me opportunities to meet and know several such individuals, including several of the impressive nominees we will consider through our deliberations. Nonetheless, I believe that the work of Mary Catherine Swanson, founder of the AVID (Advancement Via Individual Determination) Program, best exemplifies the type and level of accomplishment intended to be recognized through the Brock International Prize in Education.

The Brock Award is designed to recognize an individual who has made a specific innovation or contribution to the science and art of education. When Mary Catherine Swanson was a teacher at Clairemont High School, her school was accustomed to serving middle class, academically talented students through a rigorous, college-preparatory curriculum. When an integration order led significant numbers of low-income, minority students to Clairemont High School, Ms. Swanson defied the conventional wisdom that supported the creation of remedial programs to "meet the needs" of these students. Instead, she created a program to help the new students succeed in the same challenging courses offered to other Clairemont students. The innovation (AVID) was designed to maximize student motivation to succeed in high school and beyond, while simultaneously ensuring that students would have the organizational skills, thinking skills, study skills, and other related scaffolding that could accelerate student learning (sometimes traversing years of academic deficits) and maximize academic success. This specific innovation is a major contribution to the science and art of education.

The Brock Award recognizes individuals whose work is resulting in a significant impact on the practice or understanding of the field of education. In the 28 years since Ms. Swanson created AVID, the innovation has spread to over 3,500 schools in 45 states, the District of Columbia, and 15 countries. While the program was initially conceptualized as a high school innovation, it has been adapted to serve both elementary and middle schools. Each year, more schools and school districts adopt AVID and make profound changes in the manner in which they serve students who were not previously considered "college material." Ms. Swanson's work is changing attitudes and expectations (the attitudes and expectations of students, parents, teachers, and administrators). Consistent with the attitudinal changes, AVID is changing the everyday practices of schools and the educators who work within them.

The Brock Award recognizes individuals for innovations that will have long-term benefit to all humanity through the change and improvement of education. Since 1990, more than 55,000 AVID students (students who often were not previously considered "college material") have graduated from high school and pursued college educations. Of the 2007 AVID graduates, 98% plan to attend a post-secondary institution, 68.8% in four-year institutions, and 29.2% in two-year institutions. The AVID slogan "Decades of College Dreams" evokes images of the dramatic life changes that ensue when students who might not have held any realistic hope of a college education, graduate with the knowledge and skills essential for post-secondary success. The benefit to individual students cannot be adequately quantified. When a student who never considered college as an option becomes "college-ready" the benefit extends beyond career possibilities and earning potential. The benefit extends to the student's entire perception of their capacity to contribute and achieve. The benefit extends to all of the student's descendants. The benefit extends to society as a whole.

I agree with Washington Post columnist, Jay Mathews who wrote, "I don't know any single person in the country who has done more for our school children than AVID founder Mary Catherine Swanson." I believe that she should be the next recipient of the Brock International Prize in Education.

Sincerely,

Joseph F. Johnson, Jr., Ph.D.
Executive Director

MARY CATHERINE SWANSON

Section I

Biography & Resumé

MARY CATHERINE SWANSON

BIOGRAPHY

Mary Catherine Swanson was born in Kingsburg, California, in 1944 the daughter of a newspaper publisher and homemaker. She earned a BA degree in English and journalism from San Francisco State University in 1966 and an MA from the University of Redlands in 1974. She taught English and journalism in four different school districts from 1966-1986.

In 1980 in response to federal court ordered bussing in the San Diego Unified School District, she developed AVID (Advancement Via Individual Determination) at Clairemont High School. Convinced that marginal students can meet almost any challenge if they are given the support they need, AVID became one of the most successful educational reform programs developed in the United States and the only school reform program ever launched and widely disseminated by a public school teacher.

In 1986 she left Clairemont High to join the staff of the San Diego County Office of Education, where under the auspices of state funding she was charged with the responsibility of spreading AVID to every secondary school in the county.

In 1992 she founded the not-for-profit AVID Center and served as its Executive Director until her retirement in 2006.

Swanson and the AVID program have been widely honored over the past couple of decades. Among the awards are features in every edition of Marquis' Who's Who in America since 1990, being cited specifically for her "outstanding achievement in education, thereby contributing significantly to the betterment of contemporary society." In 1995 the California School Boards Foundation presented its Golden Bell Award to AVID "for an innovative, exemplary program which has been replicated in more than 500 schools within the state by educators whose efforts have made a demonstrated difference for students." In 1993, Swanson received the Freedoms Foundation Valley Forge Teachers Medal for Excellence "for designing a program which allows all students to achieve academically and become contributing members of our democratic society . . ." In 1991 she earned the Charles A. Dana Foundation $50,000 Award for Pioneering Achievement in Education. The Dana Foundation singled out Swanson "for heeding the teacher's calling at the highest level of professional dedication in your development of AVID, an imaginative restructuring of schools that has given thousands of students the skills, support, and guidance that they need to fulfill their potentials . . . ." In 2002, Swanson was awarded the McGraw Prize in Education, the highest award an educator can receive in the United States, and was featured on 60 Minutes II, CNN and in Time Magazine where she was featured as America's Best Teacher. She has delivered numerous university commencement addresses and has received three honorary doctorates.

Swanson has been married to Tom Swanson, a retired bank president, for 40 years. They have one son who teaches Advanced Placement History and AVID at a San Diego high school.

MARY CATHERINE SWANSON

RESUMÉ

Education
Bachelor's Degree in English and journalism
San Francisco State University
1966

Master of Arts
University of Redlands
1974

Work History
Public school English and journalism teacher in four districts
Developed AVID in 1980 to increase the academic success of marginal students
1966-1986

San Diego County of Education – Supported the spread of AVID throughout secondary schools in San Diego County
1986-1992

Founder and Executive Director of the AVID Center
1992-2006

Honors
McGraw Prize in Education -- 2002
California School Board Association's Golden Bell Award – 1995
Freedom Foundation's Valley Forge Teachers Medal for Excellence – 1993
Charles A. Dana Foundation Award for Pioneering Achievement in Education – 1991
Three honorary doctoral degrees
Featured on 60 Minutes II, CNN, and in Time Magazine

Personal
Married to Tom Swanson, a retired bank president, for 40 years
One son who teaches Advanced Placement History and AVID at a San Diego high school

MARY CATHERINE SWANSON

Section II

Description of AVID

AVID®
Decades *of* College Dreams

AVID (Advancement Via Individual Determination) is a college-readiness system designed to increase the number of students who enroll in four-year colleges. Although AVID serves all students, it focuses on the least served students in the academic middle. The formula is simple—raise expectations of students and, with the AVID support system in place, they will rise to the challenge. AVID students are enrolled in a school's toughest classes, such as Advanced Placement, and receive support in an academic elective class—called AVID—taught within the school day by a trained AVID teacher.

Today, AVID has been adopted by more than 3,500 schools in 45 states, the District of Columbia and 15 countries, and serves more than 250,000 students, grades 4-12. Schools and districts have taken methodologies and strategies from the elective course and implemented them schoolwide and districtwide to impact their entire communities and create articulated programs of college success.

What differentiates AVID from other educational reform programs is its incredible success rate. Since 1990, more than 55,500 AVID students have graduated from high school and gone on to college. Of the 2007 AVID graduates, 98% plan to attend a post secondary institution, 68.8% in four-year institutions and 29.2% in two-year institutions.

In the accelerated elective class, AVID students receive support through a rigorous curriculum and ongoing, structured tutorials. Schoolwide achievement results from the professional development received by subject area teachers, counselors, administrators, district administrators, and especially through the success of the students targeted for the AVID elective. AVID elective teachers support AVID students by providing academic training, managing their tutorials, working with faculty and parents, and by helping students develop long-range academic and personal plans. The best AVID elective teachers are those with high expectations for their students and for themselves, combining academic skills with a strong personal relationship with their students and their families.

For more information, visit us at
www.avidonline.org

AVID
Decades *of* College Dreams

HISTORY LESSON

AVID Flashback

It's 1980 and Mary Catherine Swanson is head of the English department at San Diego's Clairemont High School. San Diego still feels like a sleepy town, but is becoming increasingly diverse. The federal courts issue an order to desegregate the city's schools, bringing large numbers of inner city students to suburban schools. While applauding the decision, Swanson wonders how these underserved students will survive at academically acclaimed Clairemont High.

Her answer is AVID, an academic elective, but it's more than a program—it's a philosophy: Hold students accountable to the highest standards, provide academic and social support, and they will rise to the challenge.

Fast Forward

It's 2007 and policymakers and school administrators now consider AVID an essential strategy for closing the achievement gap and making the college dream accessible to all students.

Beginning with one high school and 32 students, the program now serves more than 250,000 students in over 3,500 middle and high schools in 45 states and in the District of Columbia across 15 countries. More than 55,500 students have graduated from AVID programs and matriculated to college at a rate of 95 percent rate.

THE CHALLENGE:

Closing the achievement gap and increasing the college-going rate for students from low income and minority families is a significant policy dilemma. Increasing their opportunities, participation, and success in courses of high rigor will better prepare them for post-secondary access and success.

THE SOLUTION:

AVID is designed to increase the number of students who enroll in four-year colleges. Although AVID serves all students, it focuses on the least served students in the academic middle. The formula is simple — raise expectations of students and, with the AVID support system in place, they will rise to the challenge.

HOW IT WORKS:

AVID students enroll in courses of high rigor, such as Advanced Placement and International Baccalaureate, and receive support in an academic elective class—called AVID—taught within the school day by a trained AVID teacher.

RESULTS:

AVID is currently implemented in approximately 1,380 schools in California. Of the 8,830 (82.6% of all AVID seniors) 2007 AVID graduates participating in the senior data collection, ninety-eight percent plan to attend the post-secondary institution to which they were accepted:

- 69% in four-year institutions and 29% in community colleges.

Nearly 88% of 2007 AVID graduates completed the UC/CSU "a-g" course requirements which more than doubles the completion rate for the state overall.

IMPACTS ON MINORITY STUDENTS:

Seventy-four percent (n=6,536) of the 2007 AVID senior class is represented by Hispanic, African American, Native American, and Multi-racial students, including those selecting "Other" as their ethnic affiliation. Of these, 77.6% were accepted into a four-year college or university with a remarkable 88.7% planning to attend. Overall, 98.5% of this cohort plans to attend either a 2-yr. or 4-yr. college or university.

AVID Center, February 2008

MARY CATHERINE SWANSON

Section III

AVID Fact Sheets

AVID FACT SHEET

AVID serves:

- an estimated 250,000 students
- approximately 3,500 elementary, middle and high schools

- Of the 10,938 2007 AVID graduates 98% plan to attend a post secondary institution
  - 68.8% in four-year institutions
  - 29.2% in two-year institutions

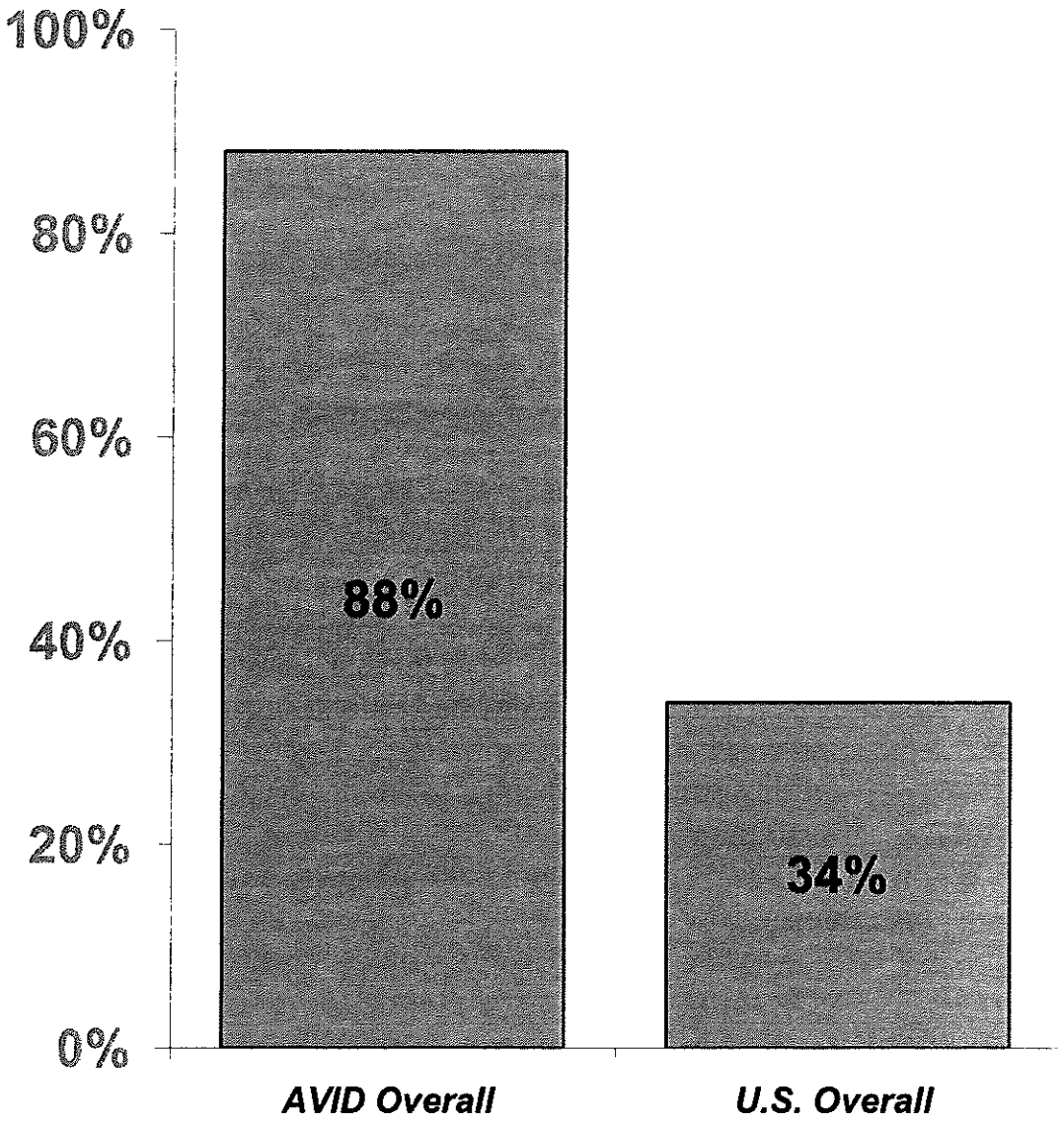
- 88.1% of 2007 AVID graduates completed the college entrance course requirements for their states' university system(s).

- 8,100 AVID graduates identified themselves as Hispanic, African American, Native American, Multi-racial, or "Other".
  Of these students,
  - 51.1% of these students further identified themselves as qualifying for Free or Reduced Lunch and had parent(s) whose highest level of education was a high school diploma or less
    - Of this group, 98.0% plan to attend a post-secondary institution
  - Likewise, 98.0% of this whole group plan to attend a post-secondary institution

Learn more by visiting www.avidonline.org

AVID Students are College Ready

The following chart shows that the vast majority of **AVID** graduates are prepared to enter a four-year college or university at a rate more than double the national rate.

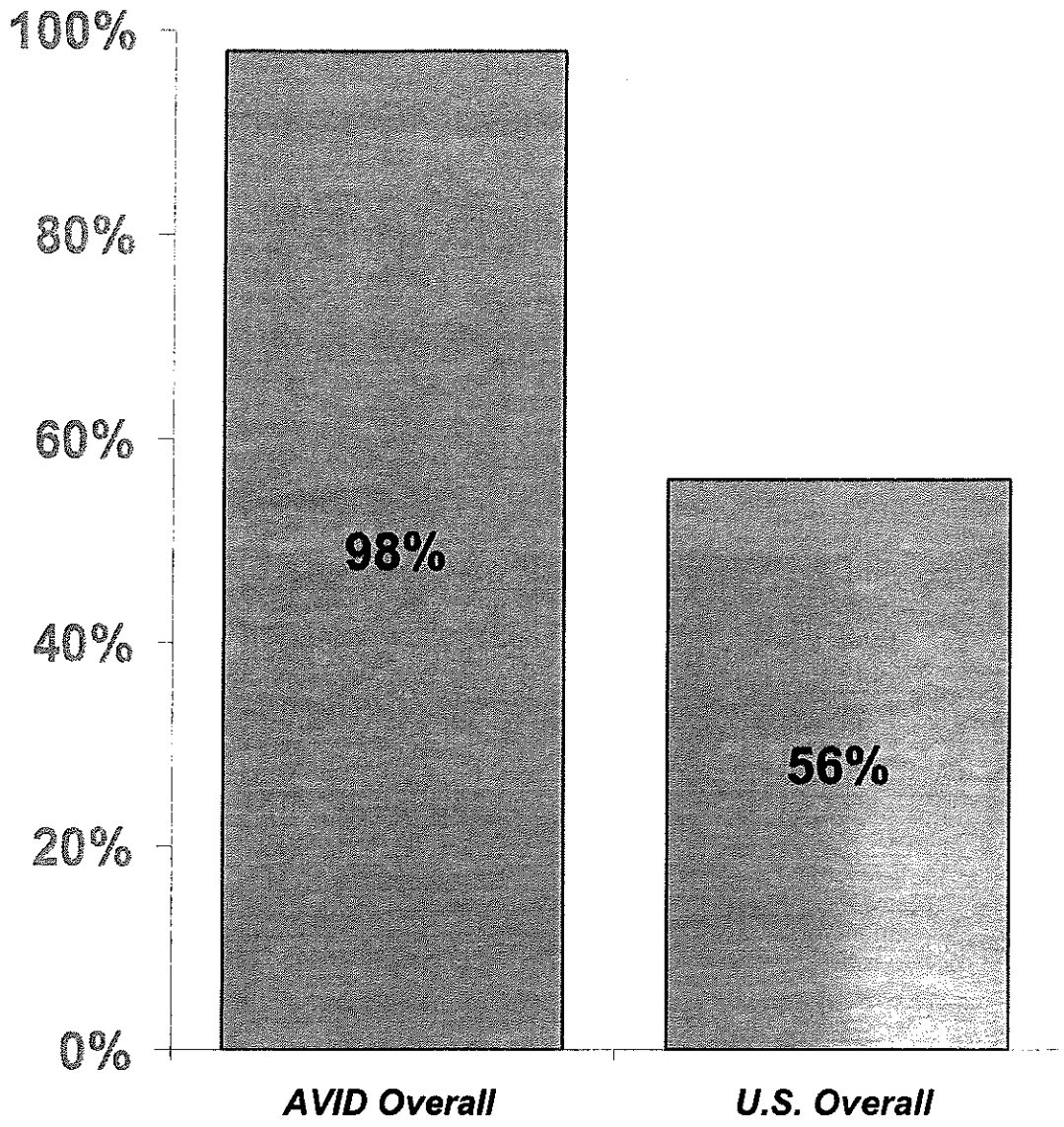


AVID 2007: Senior Data Collection [Database]. (2006-2007). n = 10,938

U.S. Overall: The Manhattan Institute for Policy Research, Center for Civic Innovation, Education Working Paper No. 8 February 2005,
Jay P. Greene and Marcus A. Winters

AVID Students are College Bound

The following chart shows that **AVID** graduates intended to attend a post-secondary institution at rate more than one-and-a-half times all U.S. graduates.



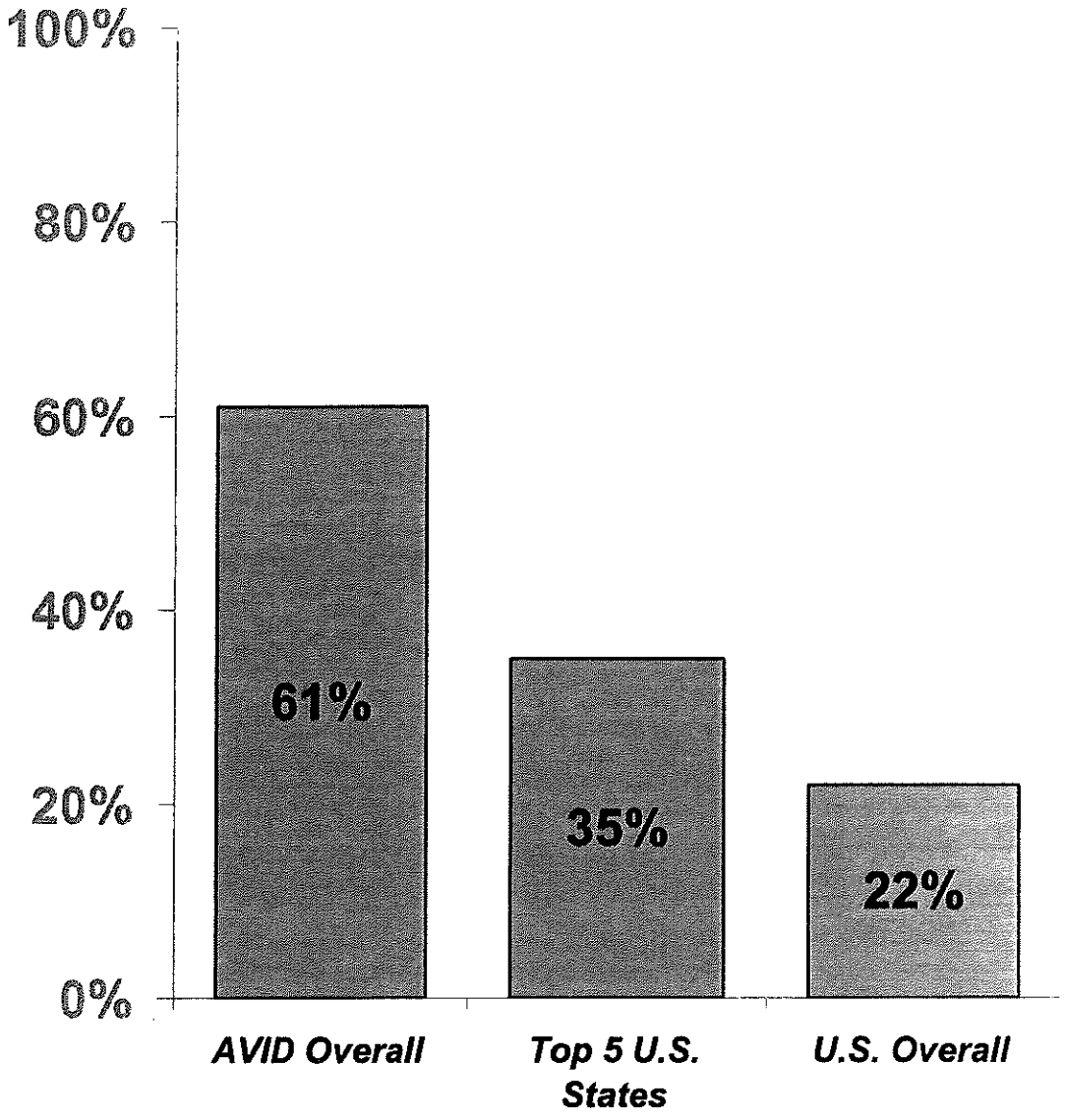
AVID 2007: Senior Data Collection [Database]. (2006-2007). n = 10,938

U.S. Overall: NCES; Common Core Data, Private High Schools Survey, Fall Residency and Migration Survey (Additional Data Provided by KY, TN, and UT), 2004

http://www.higheredinfo.org/dbrowser/index.php?submeasure=63&year=2004&level=nation&mode=data&state=0

AVID Eighth Graders Enrolled in Algebra

Enrollment in an algebra course during the eighth grade is an important indicator of which students will go on to take advanced math and science courses in high school and, in turn, apply and be accepted to a four-year college or university. This is true because of the sequential nature of math courses. The following chart compares the algebra taking rates of all **AVID** eighth graders with those in the top five U.S. states and the U.S. overall.

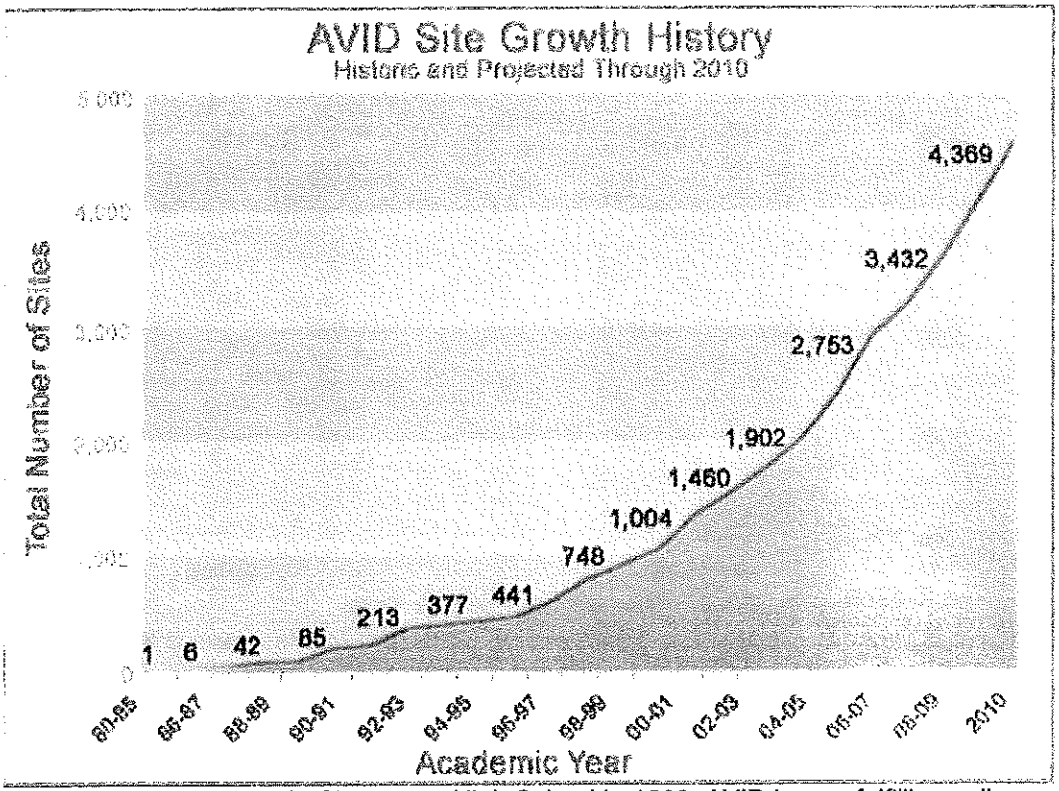


AVID 2007: General Data Collection [Database]. 2006-2007. n = 38,383

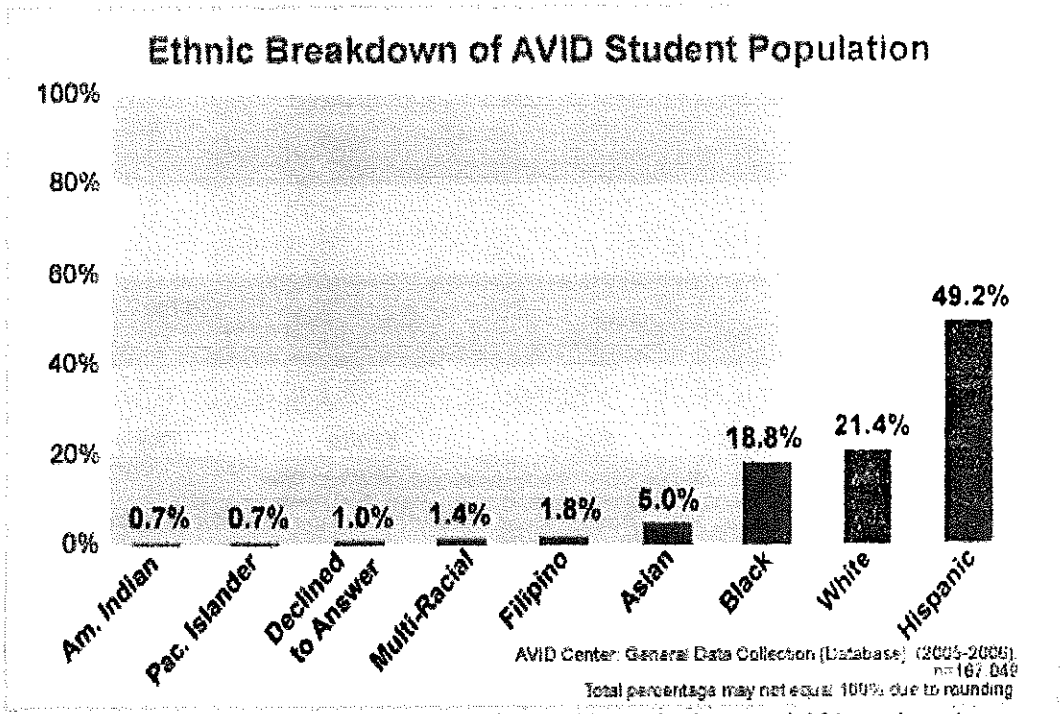
U.S. Values: Education Watch, The Nation and State Summary Reports, Key Education Facts and Figures; High Level Course Taking, 2006; The EducationTrust.

AVID Number Crunching

Education programs sometimes suffer from being warm and fuzzy, full of good intentions but without hard data to support their claims. By contrast, AVID is a proven, data-driven program with decades of measurable results. Following is a sample of AVID's key data points:

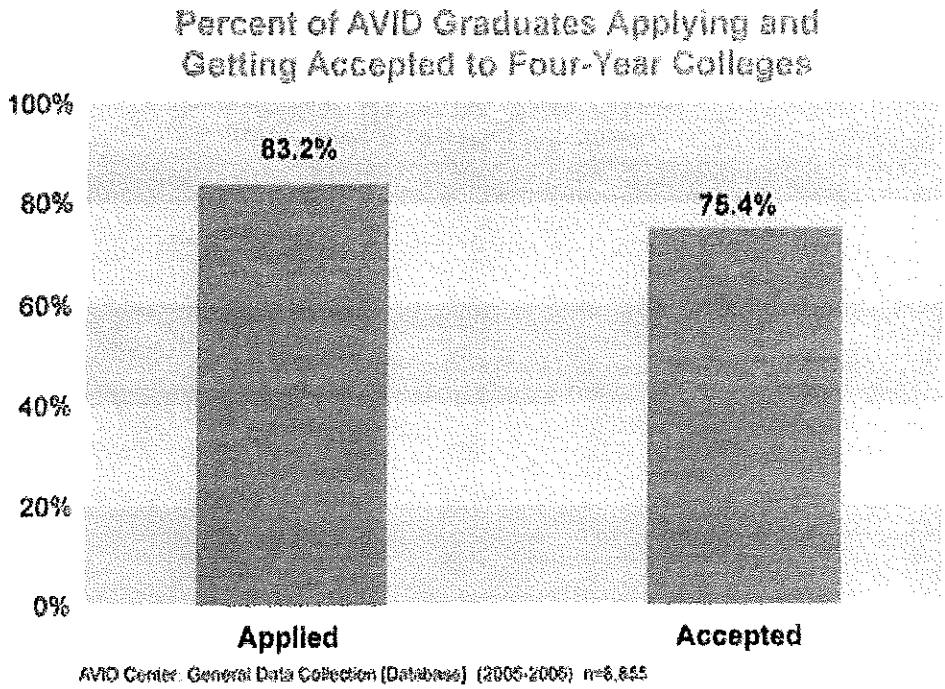


Developed at San Diego's Clairemont High School in 1980, AVID is now fulfilling college dreams for the 2007-08 school year in over 3,500 schools nationally and throughout the world.

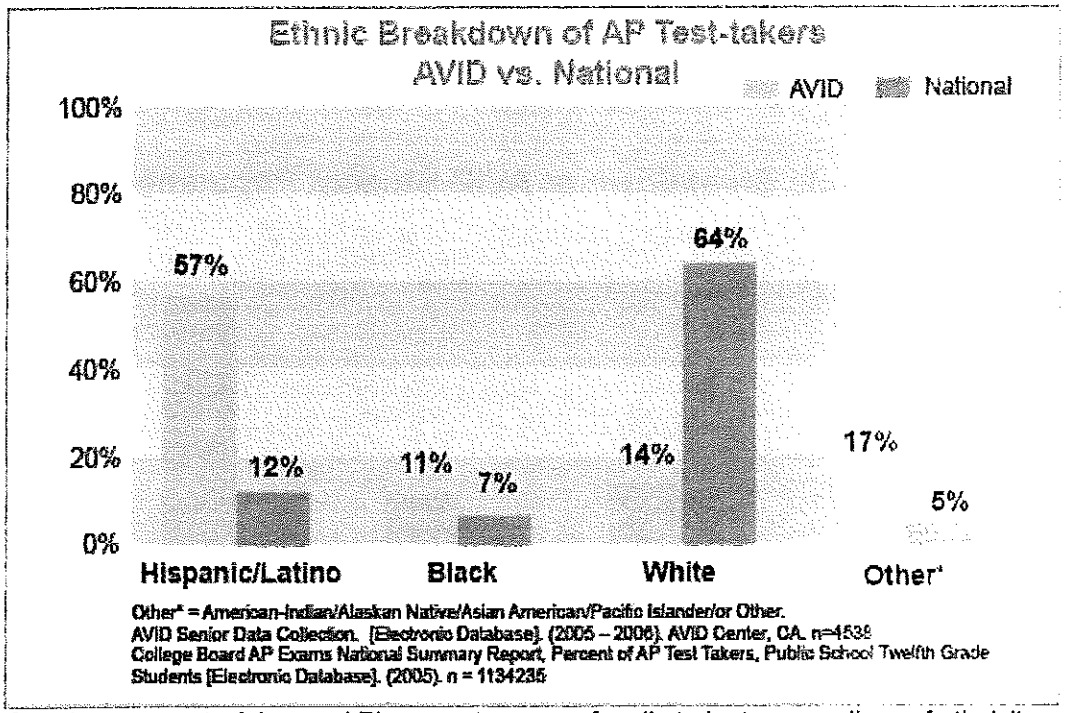


Most AVID students are underrepresented minorities -- Latinos and African-Americans -- who may lack a college-going tradition in their family and whose success is critical to closing the achievement gap.

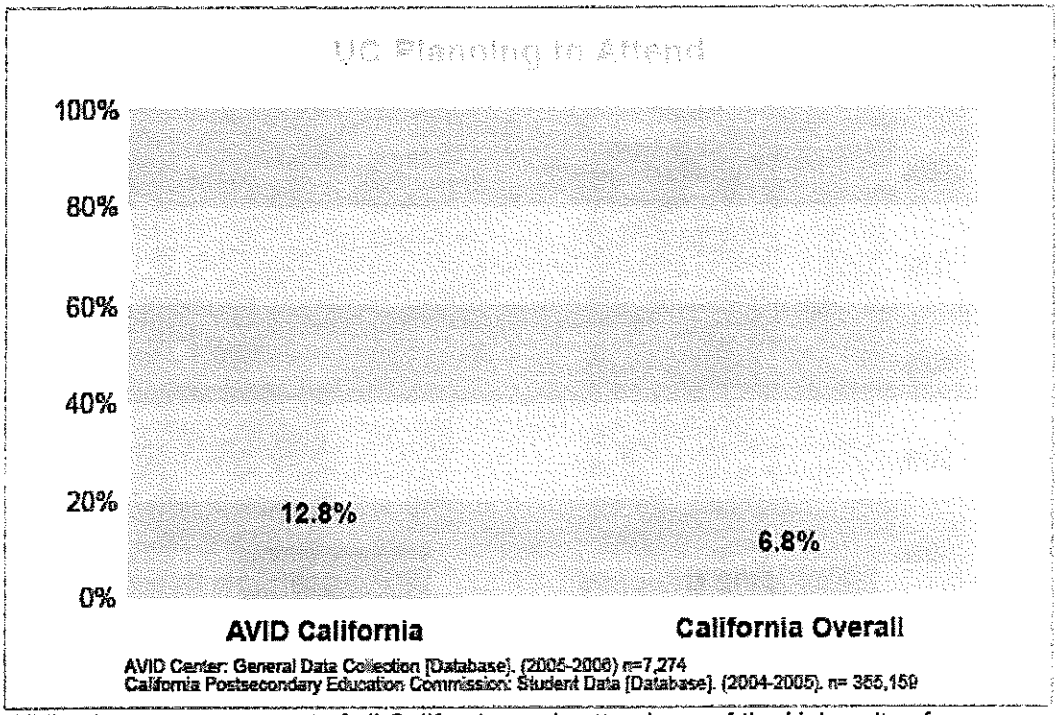
AVID Center • 9246 Lightwave Ave., Suite200 • San Diego, CA 92123
Phone (858) 380-4800 • Fax (858) 268-2265 • *www.avidonline.org*



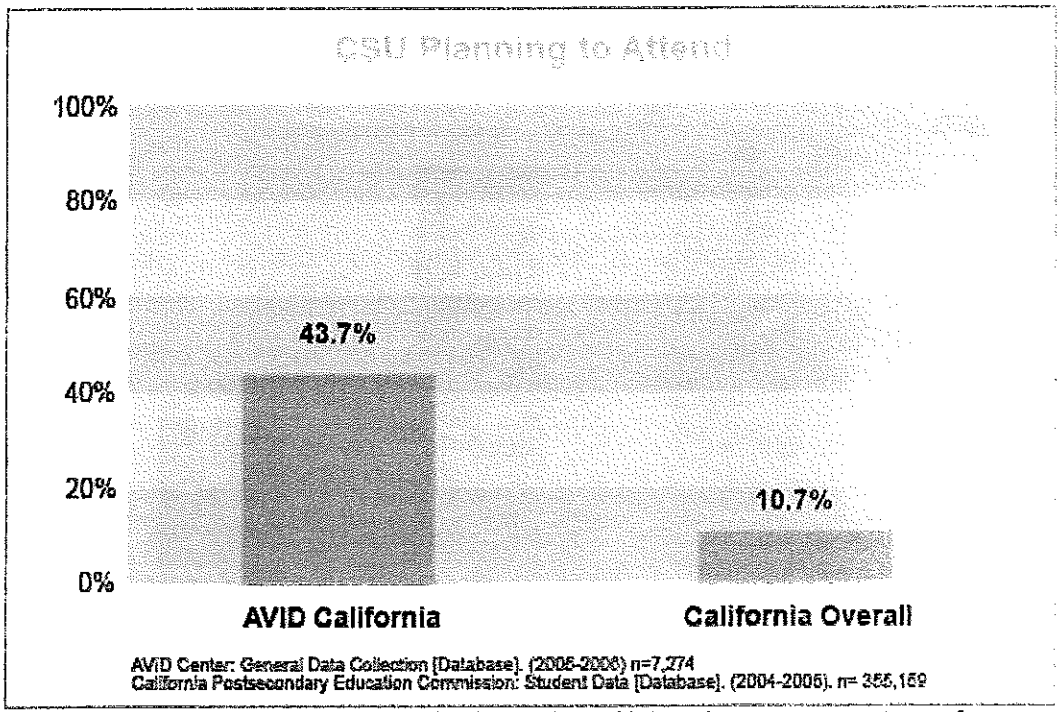
One of the most impressive and consistent indicators of AVID's success is the rate at which it sends students to four-year colleges. Seventy-five percent of 2006 AVID graduates were accepted to a four-year college.



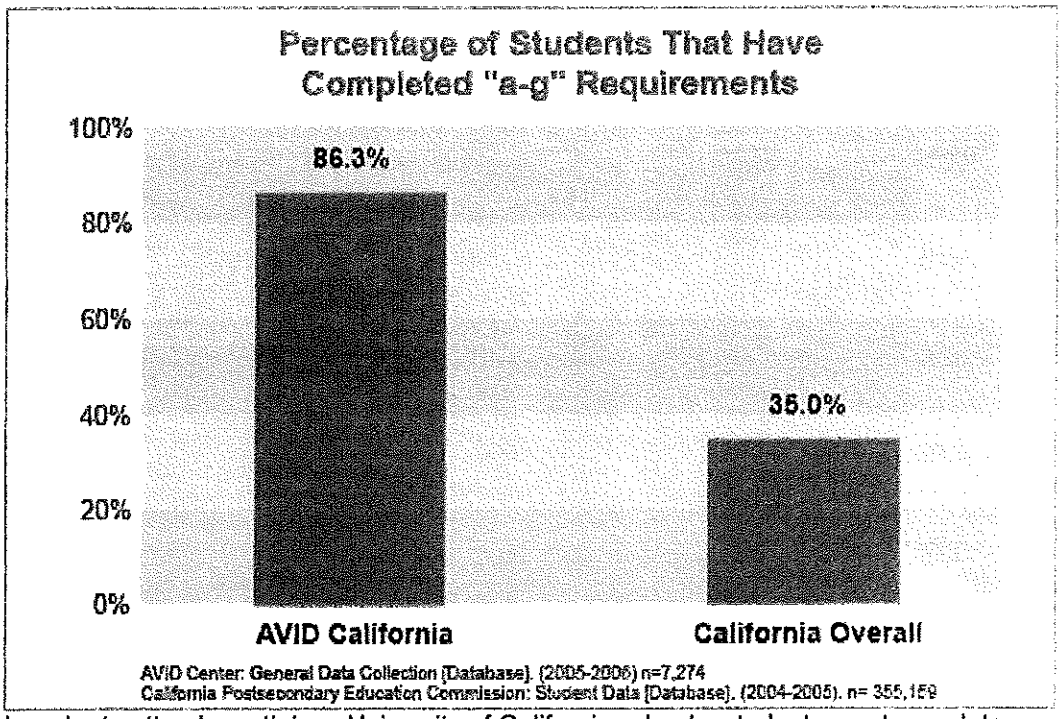
Opening access to Advanced Placement courses for all students, regardless of ethnicity or economic background, is essential to leveling the academic playing field. AVID students, who take many AP tests every year, show greater ethnic diversity than AP test-takers do overall. The proportion of Latinos taking AP exams is almost five times higher among AVID students than among U.S. students overall.



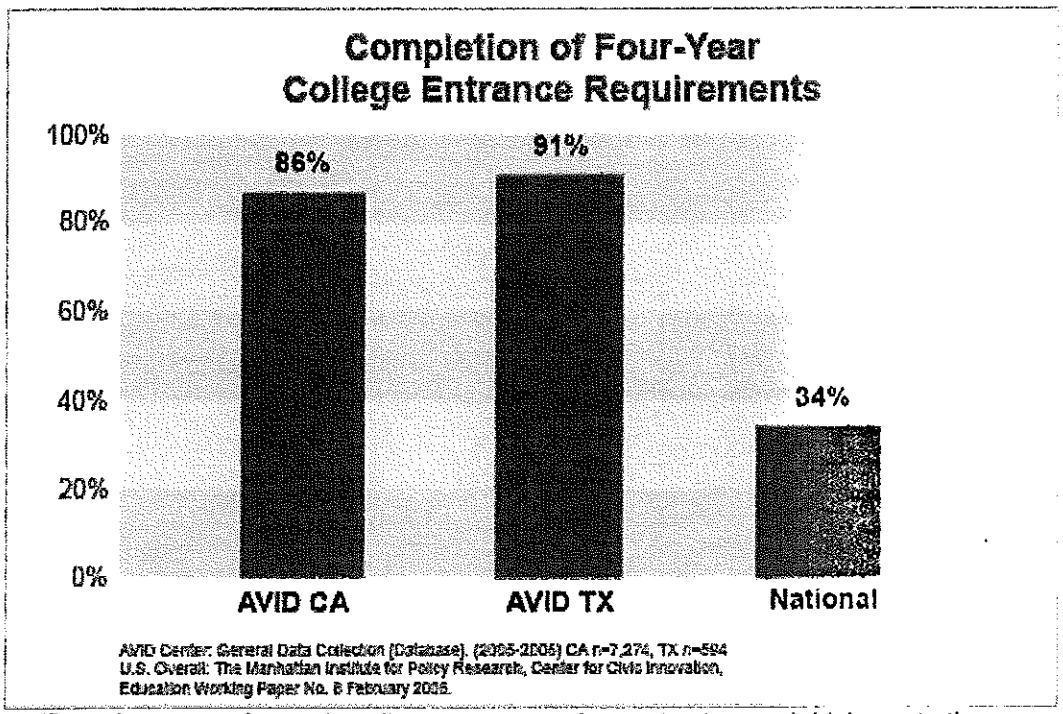
While about seven percent of all California grads attend one of the University of California's nine undergraduate campuses, almost thirteen percent of AVID grads plan to enroll in the country's best public university system.



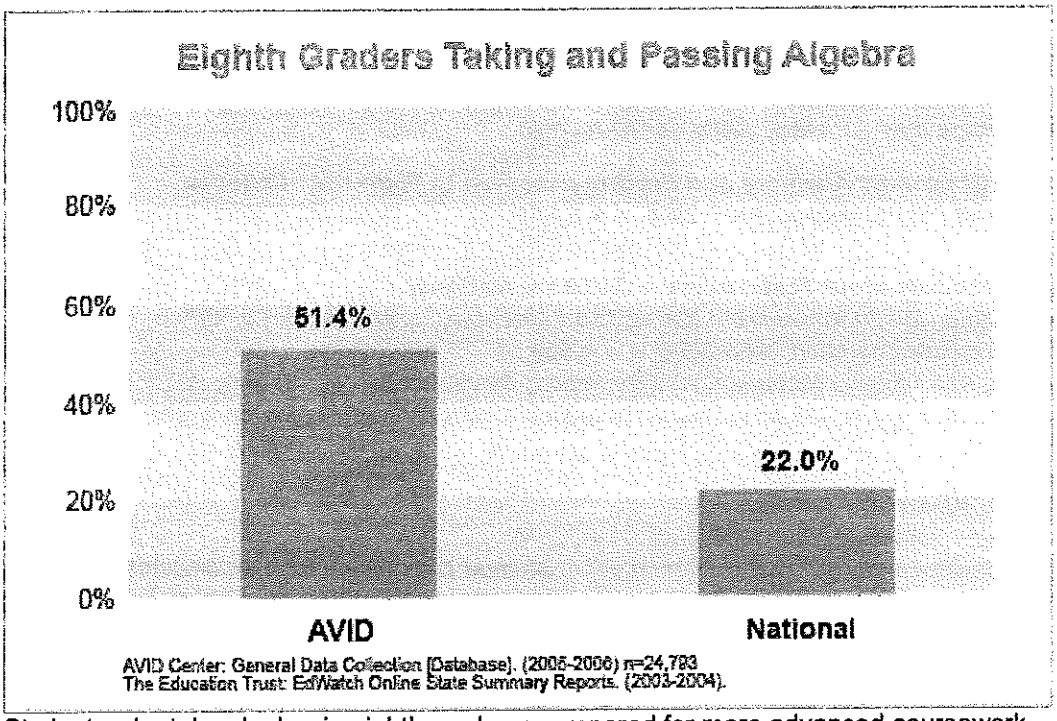
AVID students plan to attend the 23 California State University campuses at over four times the rate of all of California's high school graduates.



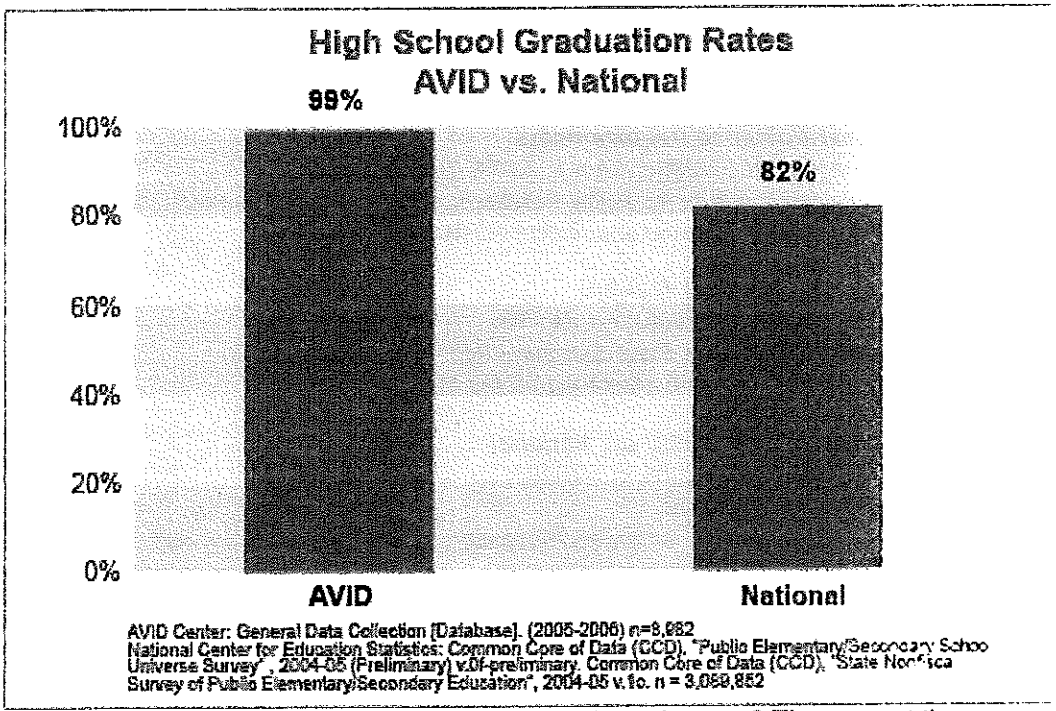
In order to attend prestigious University of California schools, students must complete a rigorous set of courses called the "a-g" requirements. The vast majority of AVID's California students complete these courses, preparing them for world-class public higher education.



AVID students complete university entrance requirements at a much higher rate than their non-AVID peers.



Students who take algebra in eighth grade are prepared for more advanced coursework in math and science once they reach high school. They are also more likely to attend and graduate from college than eighth-graders who do not take algebra. AVID encourages its junior high students to pursue college-preparatory coursework such as algebra, and they complete it at an impressive rate.



What makes AVID students stay in school when others drop out? The support they receive, the commitment to success they feel, the inspirational teachers they encounter, the self-determination they exercise—all these factors combine to make them persevere despite considerable challenges.

CHART REFERENCES

Ethnic Breakdown of AVID Student Population
- AVID General Data Collection 2005-2006. n =167,049
Total percentage may not equal 100% due to rounding.

Percent of Graduates Applying and Getting Accepted to Four-Year Colleges
- AVID General Data Collection 2005-2006. n = 8,855

Ethnic Breakdown of AP Test-Takers -- AVID vs. National
- Other = American-Indian/Alaskan Native/Asian American/Pacific Islander/or Other.*
- AVID Senior Data Collection 2005-2006. n = 4,538.
- College Board AP Exams National Summary Report, Percent of AP Text Takers, Public School Twelfth Grade (2005). n = 1,134,235 http://www.collegeboard.com/student/testing/ap/exgrd_sum/2005.html

UC and CSU Planning to Attend
- AVID General Data Collection 2005-2006. n = 7,274
- California Postsecondary Education Commission, Student Data [Database] (2004-2005). n= 355, 159 Enrollment of First-Time Freshmen age 19 and under in Public Institutions For 2005. Aggregated by Higher Education System Gender< Ethnicity Where High School County is All Known School Type is Any Public School Including Total of Public High School Graduates
http://www.cpec.ca.gov/OnLineData/SelectFinalOptions.asp

Percent of Students That Have Completed a-g Requirements
AVID General Data Collection 2005-2006. n=7,274
- California Postsecondary Education Commission, Student Data [Database] (2004-2005). n= 355,159 Enrollment of First-Time Freshmen age 19 and under in Public Institutions For 2005. Aggregated by Higher Education System Gender< Ethnicity Where High School County is All Known School Type is Any Public School Including Total of Public High School Graduates.
http://www.cpec.ca.gov/OnLineData/SelectFinalOptions.asp

Completion of Four-Year Entrance Requirements
- AVID General Data Collection 2005-2006. CA n = 7,274, TX n=594.
- U.S. Overall: The Manhattan Institute for Policy Research, Center for Civic Innovation, Education Working Paper No. 8 February 2005, Jay P. Greene and Marcus A. Winters

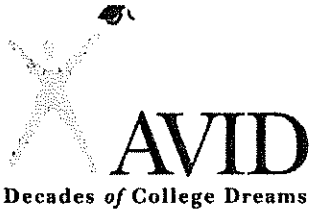
Eighth Graders Taking and Passing Algebra
- AVID General Data Collection 2005-2006. n = 24,793.
- The Education Trust: EdWatch Online State Summary Reports (2003-2004)
http://www2.edtrust.org/edtrust/summaries2004/states.html

High School Graduation Rates -- AVID vs. National
- AVID General Data Collection 2005-2006. n = 8,982.
- National Center for Education Statistics
Common Core of Data (CCD), "Public Elementary/Secondary School Universe Survey" , 2004-05 (Preliminary) v.0f-preliminary
Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education", 2004-05 v.1c
http://nces.ed.gov/ccd/bat/Result.asp?id=835592128&CurPage=2&view=State&ar=&processed=False&catVar=0&catFlag=YN
n = 3,089,852

MARY CATHERINE SWANSON

Section IV

What Others Say About Mary Catherine Swanson



WHAT OTHERS SAY:

"[AVID] works because it understands that students need both high expectations and challenging work, but that they also need the support of caring relationships with teachers and peers to live up to those expectations. Learning is a highly social activity, and what Mary Catherine wisely recognized was that you cannot make great strides in learning unless you attend not only to rigorous skill development but also to the social needs that students bring with them to school—the need to belong, the need for trusting social relationships, and the need for meaningful intellectual challenge."

- Joshua Aronson
Visiting Scholar, Russell Sage Foundation
Associate Professor, Department of Applied Psychology
New York University

"When so many teachers and administrators were focused on helping low-income and minority students avoid failure and stay in high school, Mary Catherine was focused on figuring out how to help these same students excel and go on to college. She examined with great care the skills and knowledge her more advantaged students brought to her Advanced Placement and honors classes and then developed a set of reliable strategies for helping all of her students acquire such competency. As a result tens of thousands of students are now successful college students and graduates. Mary Catherine was driven by the belief that the accident of where a child goes to school shouldn't be the determinant of the quality of education that child receives."

- Uri Treisman
Professor of Mathematics &
Executive Director Charles A. Dana Center
The University of Texas at Austin

"First, (AVID) creates a classroom environment where kids are encouraged to take learning seriously, and, secondly, to see themselves as scholars. I'd like to expand that notion beyond school, after school, at home. AVID also creates an environment for peer support, and for kids, that's everything. If you can create an intellectual environment and peer support, it can have long-term effects."

- Dr. Peter Noguera
Professor of Education
New York University

"We have learned how thin the evidence base is, that is to say, how many decisions are being made on the basis of anecdote or impressions or sales pitch or, in a more positive way, professional judgment of good people ... the programs that can show, not just say, but show that they can produce—those are the programs that should be funded. And AVID is one of those programs."

- John Yochelson Executive Director
BEST (Building Engineering and Science Talent)
Former head of the Council on Competitiveness

"I don't know any single person in the country who has done more for our school children than AVID founder Mary Catherine Swanson."

- Jay Mathews, *The Washington Post* Columnist
Author, Class Struggle: What's Wrong (and Right) with American's Best Public High Schools

"... what AVID shows is that high minority achievement can be more ordinary when schools not only insist on academic rigor but also offer personal support. AVID offers a blueprint for this scaffolding."

- Richard Rothstein, *New York Times*

"Today (AVID) is widely regarded as one of the most effective educational reforms ever created by a classroom teacher. The results have been extraordinary."

- Andrew Goldstein, *Time Magazine*

"AVID revolutionizes the way teachers teach in public school."

- Scott Pelley, CBS 60 Minutes II

MARY CATHERINE SWANSON

Section V

Article from the
Journal of Education for Students Placed At Risk

JOURNAL OF EDUCATION FOR STUDENTS PLACED AT RISK, 12(2), 185–212

A Comparison Study of AVID and GEAR UP 10th-Grade Students in Two High Schools in the Rio Grande Valley of Texas

Karen M. Watt, Jeffery Huerta, and Aliber Lozano
The University of Texas Pan American

This study examines 4 groups of high school students enrolled in 2 college preparatory programs, AVID and GEAR UP. Differences in student educational aspirations, expectations and anticipations, knowledge of college entrance requirements, knowledge of financial aid, and academic achievement in mathematics were examined. Adelman's (1999) anticipations scale was used to measure the college plans of the 4 groups of students. Main findings included higher aspirations and college knowledge for AVID and GEAR UP students, and significantly higher academic preparation for AVID students. This study examined 10th graders and is the first part of a 2-year study of AVID and GEAR UP students.

Hispanics have made tremendous strides over the past several years in college enrollment rates. The increase in Hispanic college enrollment grew by 161% between 1976 and 1997 (Perna, 2000). It is the highest growth of any of the ethnic groups in the United States. Yet Hispanics are the ethnic group that is least likely to attend college. As reported in the 2000 U.S. Census (U.S. Census Bureau, 2002), the Hispanic population has grown by over 60% since 1990; 80% of that growth is in Texas, California, New York, Florida, Illinois, Arizona, New Jersey, New Mexico, Colorado, and Nevada (President's Advisory Commission, 2003). At the same time, college enrollment of Hispanics in higher education has grown at a disproportionately lower rate, with Hispanics being the least educated of any ethnic group. In states with the highest populations of Hispanics, California and Texas, only 55% and 56%, respectively, graduate from high school (Greene, 2001).

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Of those Hispanic students who do graduate from high school, very few are entering and completing college, despite gains in overall college enrollment over the past 30 years. Hispanic students are still entering postsecondary institutions at much lower rates than White students (Gándara & Bial, 2001). Underrepresentation of Hispanic students in postsecondary education is affected by lower high school graduation rates and lack of college preparation (Perna, 2000). Only 52% of Hispanic students graduate from high school and only 9% are minimally prepared for college (Greene & Forster, 2003). Only 10.1% of undergraduates are Hispanic and only 7.1% of bachelor's degrees awarded in 2000–2001 were awarded to Hispanics (President's Advisory Commission, 2003).

To increase the likelihood of Hispanic students enrolling in college, the Commission on the Educational Excellence of Hispanic Americans recommended setting new and higher expectations for Hispanic students by helping parents navigate through the educational system, by developing educational partnerships, and by implementing nationwide awareness on college preparation. Other recommendations included reinforcing high-quality teaching, initiating a research agenda on Hispanic student education, and ensuring full access to college for Hispanic Americans (President's Advisory Commission, 2003).

Efforts to increase the college enrollment of Hispanic students have focused on three factors: academic preparation, increased educational aspirations, and financial assistance (St. John, 1991). Early intervention programs with long-term strategies that focus on these three factors aim at alleviating the existing problem of Hispanic underpreparedness for college. The University of Texas Pan American (UTPA) has increased Hispanic students' access to higher education and helped better prepare them to succeed in college by implementing two early preparatory college programs, Advancement Via Individual Determination (AVID) and Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP).

One of these programs, GEAR UP, was established by the federal government under the Higher Education Amendments of 1998. Over $120,000,000 was made available for local education agencies, states, regions, and/or institutions of higher education to provide college awareness and support for underrepresented students. GEAR UP grants have been allocated to 324 entities since 1999. The largest GEAR UP grant in the nation, at $27.9 million, was awarded to UTPA in 2001. The project was designed to increase college enrollment rates by developing and offering comprehensive services for participating students, their parents, and their teachers. Five years later, the project graduated a cohort of 7,184 students from 17 high schools (98% Hispanic, 88% low-income).

A second UTPA initiative with goals similar to those of GEAR UP's—such as increasing access to higher education—is AVID. Unlike GEAR UP, AVID is not a federal initiative, so schools must fund their AVID programs through other funding sources, such as grants, Title I funds, local funds, and state compensatory funds.

AVID was implemented in one Rio Grande Valley school district in 1999 with a Comprehensive School Reform Demonstration grant. To date, AVID has served over 4,700 students from 19 high schools and 18 middle schools in 13 Rio Grande Valley school districts.

PURPOSE

The purpose of this study is two-fold. First, researchers sought to assess what the differences in educational aspirations, educational expectations and anticipations, knowledge of college entrance requirements, knowledge of financial aid information, and academic achievement were among four student participant groups in the study. Second, researchers sought to assess what effect participation in GEAR UP and AVID activities had on the academic achievement, aspirations, anticipations, and college knowledge of the participant groups.

To examine the effects of college preparatory programs, a total of 142 10th-grade high school students were surveyed from two local high schools serviced by the AVID and GEAR UP programs. These students were selected from one of four groups, depending on the college preparatory program they were enrolled in, and were broken down as follows: 40 students were in AVID, 40 were in GEAR UP, 22 were in both AVID and GEAR UP, and 40 were not in either of the programs and thus served as a control group. It was hypothesized that students who enroll in one or both UTPA college preparatory programs would exhibit much stronger knowledge about college preparation, be more academically prepared, and have higher aspirations and anticipations for postsecondary education than students who did not participate in the preparatory programs.

PERSPECTIVES

The goal of early intervention programs is to provide disadvantaged students with the skills, knowledge, and general college preparation needed to enter and succeed in college (Perna & Swail, 2001). Although existing preparatory programs offer a variety of services, those that have the potential to increase the number of underrepresented students who enroll and succeed in college are those that offer high-quality instruction, special services such as tutoring, or a redesigned curriculum that better suits the students' needs (Gándara & Bial, 2001; Gándara & Moreno, 2002).

Several programs designed to increase college attendance rates of Hispanic students have been researched. These include Upward Bound, SCORE (SCORE Education: Success in a rich CORE curriculum for everyone!), and Project GRAD (Graduation Really Achieves Dreams). All three of these programs are "distinctive

in their focus on ensuring that promising Latino and other minority students do what is necessary to attend college" (Slavin & Calderon, 2001, p. 79).

Upward Bound is a federally funded program that provides low-income students with extra instruction, study skills, and tutorials, usually after school or on Saturdays, and an intensive 6-week summer program on a college campus. Upward Bound students enroll in college at a higher rate than their comparison peers (Burkheimer, Riccobono, & Wisenbaker, 1979). Myers and Schirm (1999) also found that Upward Bound students received more academic credits in math and social studies than did the comparison group.

SCORE was developed in California and provides students with career counseling, tutoring, opportunities to join clubs, and a summer academic program focusing on college preparatory courses. A parental involvement component is also a strong part of SCORE. In several case studies conducted on SCORE schools, findings revealed that Hispanic student enrollment in algebra, chemistry, and physics increased, as did participation in the Scholastic Aptitude Test (SAT; Wells, 1981).

Project GRAD, developed by the former CEO of Tenneco, Inc. in Houston, Texas, in conjunction with the University of Houston and the Houston Independent School District, encourages community and parental involvement, trains teachers in strategies to improve classroom management and student performance in math, reading, writing, and language, and provides scholarship incentives for students who graduate on time with at least a 2.5 GPA (Ketelsen, 1994). In one Houston high school with a historically high dropout rate, the results of Project GRAD are promising: 61% of an entering class of 450 students graduated. This is a 57% increase over the graduation rates from previous years. Out of the 450 students, 28% entered college as opposed to 14% from previous years (McAdoo, 1998).

College Academic Preparation

Academic preparation is one of the most potent predictors of educational performance and enrollment in college (Perna, 2000). Recent research has focused on the importance of the high school curriculum in college success, and less emphasis is now placed on college SAT/Academic Competency Test scores and high school class rank.

The greatest predictor of postsecondary educational attainment is participation in an effective academic high school curriculum. The completion of a rigorous curriculum is strongly associated with achieving a college degree, more so than grades or class rank. A rigorous curriculum is a particularly strong college enrollment predictor for African American and Hispanic students (Adelman, 1999). The other significant predictor of college success is completion of high level mathematics classes in high school. Students who completed math classes beyond Algebra II are twice as likely to complete a bachelor's degree (Adelman, 1999; Weiss, 2001).

However, economically disadvantaged students with undereducated parents are less likely to enroll in and complete a rigorous set of high school courses. Regardless of socioeconomic status (SES), students who complete a strong academic curriculum in high school are more likely to enroll and succeed in college (National Center for Educational Statistics, 2001; Warburton, Bugarin, & Nunez, 2001). In a recent study, students who enrolled in advanced placement (AP) classes perceived that they were well prepared for college, had the best teachers, and were more successful in high school. These students also tended to pursue more challenging major areas of study in college and were more likely to graduate (Santoli, 2002).

Educational Aspirations

Traditionally, educational aspirations have been defined as a desire for future status or gaining personal goals toward which an individual will direct behavior (Johnson, 1992; Williams, 1972). The impact of educational aspirations on students' academic achievement is well documented (Campbell, 1983; Kao & Tienta, 1998). Educational aspirations are also one of the major predictors of college enrollment. In existing comparative studies, low-income and Hispanic students are characterized by lower educational aspirations than other ethnic groups, and their aspirations tend to be unstable. Although Hispanic students have high aspirations starting in middle school, by 10th grade those aspirations tend to decline (Kao & Tienta, 1998).

Educational aspirations of minority students do not match their academic preparation. Although White students applied to college when they met college admission requirements, minority students often applied without meeting the minimum requirements (Mahoney & Meritt, 1993). So for minority students, there tends to be a mismatch between aspirations and academic achievement (Wahl & Blackhurst, 2000). Although there is a concern over factors affecting educational aspirations, the findings are inconsistent and different factors have been outlined that impact aspirations for different ethnic groups.

The issue regarding Hispanic students is not well examined. Because aspirations are so crucial in affecting college enrollment, many preparatory programs have focused their services on this aspect (Wahl & Blackhurst, 2000). Generally, students enrolled in intervention programs have higher aspirations than do those students that do not participate in such programs (Gándara, 2002).

The length of the program participation also affects aspirations about attending postsecondary education. A similar trend depicted by Gándara (2002) noted that those students who become exposed to information about college opportunities raised their educational aspirations over time. Those students also had higher and more stable educational aspirations than did students that did not participate in the program (Gándara, 2002).

Educational Expectations and Anticipations

Though much research has focused on student aspirations for college attendance and completion as previously described, researchers have recently investigated expectations, plans, outcomes, and anticipations of students. Hauser and Anderson (1991) asked students not just about their aspirations but also about their desired outcomes or plans for college attendance and completion. They made the distinction between the broad term *aspirations* and more concrete plans as to what activities the student will actually engage in to get to college. In other words, Hauser and Anderson's notion of *plans* included more realistic assessments for future actions. They found that plans and aspirations account for much of the variation in post-high school success of seniors (Hauser & Anderson, 1991).

In addition, Bachman, Johnston, and O'Malley (1980) developed a survey, *Monitoring the Future*, which measured the post-high school plans and aspirations of high school students. The survey solicited questions about plans and desires to attend postsecondary institutions or to join the military.

Research conducted by St. John (1991) found that postsecondary plans had a significant and positive relationship with college attendance. However, aspirations alone had a more positive influence on seniors who applied for college than on those who actually attended. Therefore, St. John concluded that "aspirations alone are not sufficient to overcome poor academic preparation" (p. 154).

McDonough (1997) used Bourdieu's concept of *habitus*, or the "internalized system of thoughts, beliefs, and perceptions acquired from the immediate environment," to explain that an individual's expectations, attitudes, and aspirations are not based on rational analysis, but are "sensible or reasonable choices" (McDonough, 1997, p. 9, as cited in Perna, 2000). In other words, students tend to make choices that may or may not have to do with values and beliefs.

Bempechat (1998) described the notion of "educational motivation" as being a variety of beliefs that students have about their learning. These beliefs include their degree of confidence in their abilities to learn, their expectations and opportunities for experiencing success, their own assessments of themselves, and how well they are invested in academic tasks. Included in a student's educational motivation is the expectation to succeed in college.

Adelman (1999) constructed a variable called *anticipations* that measured the level and consistency of a student's vision, expectations, and concrete plans for his or her future education. He and his colleagues agreed that the questions that were asked of students were not necessarily about their aspirations, but more about their expectations, plans, and commitments (Adelman, 1999).

College Knowledge

Traditionally, students from lower SES groups have less access to information about college than do those from the higher economic strata. Students from upper socioeconomic classes tend to rely on a multitude of human resources for their in-

formation; whereas, those who are from low–SES backgrounds tend to depend on high school counselors to acquire college information (Cabrera & La Nasa, 2000). Students from low-income families who sought assistance from school counselors or college personnel were motivated to search for college information (King, 1996). Similarly, for Hispanic students, the biggest barriers to enrollment in college are misinformation and a lack of information about the college application process (Gándara, 2002). The paradox is that information on college requirements is readily available, but students do not know how to access it. However, higher percentages of students enrolled in preparatory intervention programs are more knowledgeable about college requirements than those who are not. Those students are also more likely to seek additional resources and ask more people for advice.

The second aspect that affects low-income students' enrollment in college is availability of financial assistance. Although qualified, some low-income students are inclined not to attend college unless financial resources are readily available (Berkner & Chavez, 1997). Financial aid is then a major predictor of low-income students' college enrollment. Increased financial grants tend to have a positive effect on low-income students' college enrollment (St. John, 1991).

COLLEGE PREPARATORY PROGRAM DESCRIPTIONS

College preparatory programs address the issue of academic achievement by supplementing regular classes with tutoring and acceleration intended to help students develop better study and test-taking skills. Those programs also promote advanced and dual-credit course enrollment. In addition to the academic improvement plan, programs also provide academic and career counseling.

The concerns of low-income and minority students not being able to pay for higher education are also addressed by college preparatory programs. Programs provide workshops, college tours, and other necessary assistance to provide students with information about college costs, programs of study, and options available for financial assistance (Perna, 2000).

AVID

AVID is a college preparatory program that was established in 1980 in one English teacher's classroom as a way to serve students who were recently bussed to the newly desegregated suburban high school in California. Mary Catherine Swanson began a social and academic support elective class called AVID to assist these students in the rigorous courses in which they were recently enrolled. Mrs. Swanson believed her students could succeed in the most rigorous curriculum, such as AP classes, but only needed extra support provided by the AVID elective. Of the 30 students who began AVID in 1980, 28 went on to college (Mehan, Villanueva, Hubbard, & Lintz, 1996).

AVID has since spread to many states, and in some cases, such as in Texas, has been used as a school reform model (Watt, Yañez, & Cossio, 2002). AVID has established indicators by which to measure the success of the program. Schools that implement AVID must successfully implement 11 essentials to be a certified AVID school. The 11 AVID essentials include: (a) student recruitment and selection requirements; (b) voluntary participation agreements from student, staff, and parents; (c) integration of the AVID elective class within the regular school day; (d) enrollment in rigorous curriculum that satisfies college requirements; (e) introduction of a strong writing and reading curriculum; (f) introduction of inquiry for critical thinking skills; (g) emphasis on collaborative instruction; (h) academic assistance through tutoring with trained college tutors; (i) evaluation of program implementation through data collection and analysis; (j) district and school commitment to AVID funding appropriations and compliance; and (k) interdisciplinary site team collaboration (Swanson, 2000). Implementation of the AVID essentials ensures a school environment conducive to empowering students to become more responsible for their learning and thus increases their college preparation and educational expectations to pursue a college education.

The crucial aspect of the AVID program is in the strength of the AVID site team and, specifically, the lead teacher or coordinator in charge of coordinating student eligibility, college preparation curriculum, tutoring, professional development, fundraising, and parental components. Selected students are exposed to college-level classes and are academically supported with an AVID curriculum and academic assistance provided by the AVID elective class. Other AVID activities are developed to increase student and parent involvement in the college preparation process (Swanson, 2000).

The significance of AVID in schools has been documented to positively affect the performance of non-AVID students in studies conducted within the Texas school system. Schools with AVID programs improved their accountability ratings as measured by the Texas Assessment of Academic Skills; showed an increase in enrollment in courses of high rigor, such as AP; and showed increases in graduation or completion rates (Watt, Powell, Mendiola, & Cossio, 2006). The significance of AVID in schools has also been documented in studies conducted within the California school system. Students enrolled in AVID on a continuous basis demonstrated a greater propensity toward attempting and completing college-level courses, thereby producing a larger number of AVID students enrolling in colleges or universities than AVID student dropouts or students with no AVID background (Slavin & Calderon, 2001). AVID's reputation for improving college–going rates and academic success for underserved minorities assisted in increasing its implementation in over 700 U.S. schools and its overseas implementation in U.S. government-sponsored schools in Europe and Asia, subsequently earning an international status (Slavin & Calderon, 2001).

AVID's approach to college preparation involves placing students in an advanced curriculum that will ensure that students graduate with the requirements for entrance into 4-year colleges. AVID also provides students with exposure to an academic environment similar to that found in college classrooms. College entry skills and academic survival skills including study, organization, management, critical reading skills, and standardized college entrance exam preparation are areas targeted in the AVID elective class.

GEAR UP

GEAR UP is a discretionary grant program established under the Higher Education Amendments of 1998 to support states and partnerships that provide information on early college awareness, academic support, and financial assistance to disadvantaged students, to enable them to enter and succeed in postsecondary education. The grant awards are competitive for up to 6 years in duration and are available to states or to partnerships between middle schools, high schools, colleges and universities, community organizations, and businesses. GEAR UP's intent is to impact low-performing schools serving low-income and minority students. The uniqueness of the program is that it serves entire cohorts of low-income students, rather than those chosen based upon some preselected criteria. The grant stipulates that at least 50% of the participants must be eligible for free or reduced-price lunch or are at or above 150% of the poverty level.

GEAR UP provides academic models and financial incentives to upgrade low-performing schools and their students by academically aligning the K–16 curriculum; eliminating academic tracking in schools; providing after-school and summer activities; and offering continuous curriculum content and other professional development opportunities to teachers and school staff. GEAR UP grantees are required to provide services to raise the educational aspirations and strengthen the college preparation of whole cohorts of students starting no later than the seventh grade. Despite the common overarching goals of GEAR UP grantees, however, each state or partnership grant differs from one another based on the management and selection of the comprehensive services provided. These services often include some or all of the following: mentoring, tutoring, other forms of academic assistance, counseling, outreach, parental involvement services, curriculum support, and teacher development.

Most GEAR UP grantees provide various services to increase college access and awareness, such as preparation for admission tests, dissemination of information concerning college application procedures, financial aid counseling, and information for parents to assist them in preparing their children for college. Also, every GEAR UP student receives the 21st-Century Scholars Certificate, which notifies students and parents about their eligibility for financial aid and scholarship funds. GEAR UP grantees may also provide college financial assistance to their

participating students, though a scholarship component is not required by the grant and not employed by all state or partnership grants.

GEAR UP has not been researched as extensively as other programs, such as AVID, because it is still a very new initiative. However, each grantee is required to complete an annual performance report delineating the services it has provided to students. Also, continued funding is contingent upon the successful review and approval of this report each year.

METHODS AND DATA COLLECTION

This study employs as its primary methodology a quasi-experimental design that allows for a reduction in threats to internal validity without having to randomly assign subjects (Campbell & Stanley, 1963). Mixed-method research was considered in this study so that the researchers could triangulate and enrich other data sources and methods. Tashakkori and Teddlie (1998) described the concurrent triangulation strategy, which allows researchers to use two or more different methods of data collection to "confirm, cross-validate, or corroborate findings within a single study" (as cited in Creswell, 2003, p. 217; see also Greene, Caracelli, & Graham, 1989; Morgan, 1998; Steckler, McLeroy, Goodman, Bird, & McCormick, 1992). Both the quantitative and qualitative data were collected and analyzed concurrently. Qualitative data collection is in the form of student focus group discussions, which give "particular significance to the voices and feelings of the participants" (Fontana & Frey, 1994).

Site Selection

Two schools within the same school district in the Rio Grande Valley of Texas were chosen for this study because they met several relevant criteria set by the researchers. First, the district of study has been implementing AVID longer than any other district in the geographic location. Also, within this district, one of the selected high schools recently implemented GEAR UP and AVID; the other selected high school only implemented AVID. This allowed researchers to select a control group from the school that did not have a GEAR UP program. It also allowed researchers to choose AVID students who were not GEAR UP students and to choose GEAR UP students who were not AVID students. Lastly, both high schools have a high percentage of Hispanic and low-SES students.

The GEAR UP high school was selected for this study because at the time of the study, it was the only school in the Rio Grande Valley that had 10th-grade students who had been served by GEAR UP for 3 years and also concurrently had AVID in place for at least 3 years. Researchers were able to access GEAR UP students who were not AVID students, as well as students who were enrolled in both programs.

A second high school, the AVID school, was selected for this study because it had been implementing AVID for 5 years at the time of the study, and it was not served by GEAR UP. Because AVID does not serve entire grade level cohorts, as GEAR UP does, this allowed researchers to access students who were not enrolled in either of the programs. The selected schools are similar in size, demographic profile of students, and academic performance of students (Texas Education Agency, 2003).

School Descriptions

GEAR UP High School (GUHS), which served 1,951 students at the time of the study, had been implementing AVID since opening its doors in the fall of 2000 and welcomed a cohort of GEAR UP ninth graders in the fall of 2002. It served a predominantly minority population comprised of 98% Hispanic students; 89% of the students were considered economically disadvantaged. Based on the 2002–2003 performance of GUHS students on Texas standardized tests in areas of reading and math, 67% and 57%, respectively, met the passing standards. With regard to AP, 11% of GUHS student population enrolled in advanced courses in 2001–2002 and 11% took AP or International Baccalaureate (IB) exams.

AVID High School (AHS) had been implementing the AVID program for the past 5 years at the time of the study. Based on 2002–2003 data, AHS served 1,900 students. Similar to GUHS, the AHS student population was comprised of predominantly Hispanic (94%) and economically disadvantaged (74%) students. The academic performance data of AHS students on state standardized tests in reading and math indicated that 74% and 69%, respectively, passed each subject area. AP data for 2001–2002 indicated that 23% of AHS students took advanced courses, and 17% tested for college course credits via AP or IB exams. Upon comparing the academic performance of the two schools, it was noted that AHS performance was slightly better than that of GUHS; however, this would be addressed during the student selection process.

Student Selection

Student selection began with the review of 61 10th-grade AVID student transcripts from AHS, the AVID/non-GEAR UP high school. In this first group, 40 of the 61 AVID students were randomly selected. This group served as the basis for selecting the two other non-AVID groups. After selecting this AVID student group, a second group of students from AHS was selected by reviewing 467 10th–grade student transcripts. A student was chosen to closely match each of the 40 AVID students from the first group, resulting in the selection of 40 non-AVID 10th graders. This second group of students was matched first by gender, then by similar 8th-grade coursework (whether or not the student took pre-AP Algebra and/or

English I in 8th grade), and finally by similar 9th grade academic performance (denoted by transcript grades in the core academic areas of science, math, social studies, and language arts). Because GEAR UP was not at AHS, the group of 40 non-AVID 10th grade students had not received any services from either of the college preparatory programs and thus served as a control group for the study. All students in both groups at AHS were Hispanic.

At GUHS, the GEAR UP school, two groups of students were identified. A group of 22 10th-grade GEAR UP/AVID students were chosen for the study, which represented the entire 10th-grade AVID population. A second group of 40 10th-grade GEAR UP/non-AVID students were selected by matching their transcripts to the original AVID student group from AHS. The matching followed a similar process in which 40 GEAR UP/non-AVID students from GUHS were matched to the 40 AVID students from AHS by gender, 8th grade coursework, and 9th grade academic performance. All students in both groups at GUHS were Hispanic.

With the four groups chosen, researchers had 142 participants in the study. From each of the four groups, eight students were chosen at random for focus group interviews. A student survey was distributed to all 142 participants, soliciting various demographic indicators that are discussed later in the article.

Measurement

Variables investigated in this article include academic achievement, educational aspirations, educational expectations and anticipations, college knowledge, participation in college activities, college requirements information, and financial aid information. These are described in the sections that follow.

Academic achievement. Student achievement can be measured using test scores or school grades. Cohen (1988) suggested that the more specific the learning outcome is defined, the more likely it is to detect the causal factor. Therefore, it is most appropriate to use subject-specific grades. In this study, researchers examined first semester 10th-grade math grades, compared to first semester ninth-grade math grades as baseline data. The second measure of academic achievement used in this study is advanced course-taking behavior; the number of advanced courses taken by each student.

Educational aspiration. Educational aspiration was assessed based on a student's choice of educational goals. The variable was measured by a survey item soliciting how much education a student wishes to achieve. Responses ranged from 1 (*less than high school*) to 5 (*graduate/professional school*). It was recoded into a dichotomous measure, 0 (*no college degree*) or 1(*college degree*).

Educational expectations and anticipations. The anticipation scale consisted of six items describing post-high school plans, specifically those relating to college attendance and completion. These items included questions like "What is the minimum level of education with which you would be satisfied?" and "What activity most likely will take the largest share of your time in the years after you leave high school?" The items were recoded into equivalent dichotomous variables, indicating either *plans* (1) or *no plans* (0) for future education, and aggregated to form an anticipation scale ranging from 0 to 6. The overall mean of the scale was 4.9 ($SD = 1.3$) with an alpha of 0.67.

College knowledge. This variable was measured by six questions related to information about the essential requirements for college entrance and four items depicting information about financial assistance available to attend college. Sample items included "Do you know about admission applications?" and "Do you know about the financial aid application?" All 10 items were coded 0 (*no*) or 1 (*yes*) and aggregated to form a college knowledge scale ranging from 0 to 10. The overall mean of the scale was 5.66 ($SD = 2.94$) with an alpha of 0.82.

Participation in college activities. The participation measure is comprised of five college activities in which AVID and GEAR UP students participated during the last academic year. Examples of these activities include field trips to colleges and college nights. These five dichotomous items were coded 0 (*did not participate*) or 1 (*participated*) and summed into a participation scale ranging from 0 to 5. The overall mean of the scale was 1.77 ($SD = 1.40$) with an alpha of 0.62.

College requirements information. This measure is comprised of eight items describing the number of people that students talk to about college entrance requirements. These people could be parents, siblings, counselors, and others. It is a scale ranging from 0 to 8 created by summing the responses, which are 0 (*no*) or 1 (*yes*). The overall mean of the scale was 3.82 ($SD = 1.96$) with an alpha of 0.59.

Financial aid information. This measure is comprised of eight items describing the number of people that students talk to about financial assistance for college. It is a scale ranging from 0 to 8 created by summing responses of 0 (*no*) or 1 (*yes*). The overall mean of the scale was 2.65 ($SD = 1.74$) with an alpha of 0.54.

Data Sources

Researchers gathered data from three main sources: student surveys, student records, and focus group interviews. As per UTPA's Institutional Review Board requirements and protocols when dealing with human subjects, students and their

parents were asked to sign informed consent and parent permission forms. Student records and survey data were entered into SPSS 11.0 for analysis.

Survey. A student questionnaire, *Survey of College Preparation,* was administered to all students participating in the study. The 25-item questionnaire included two sections, one for demographic information and another that focused on education and academic preparation. After providing instructions, one of the researchers distributed the survey to the teacher or counselor who then administered the survey to three of the student groups. The researchers personally administered the survey to the GEAR UP/AVID group.

School records. School records have been collected from the two participating schools delineating grades and advanced course enrollment. School personnel were instrumental in providing student records in electronic format. The data were then integrated with the survey, in SPSS 11.0, to provide information that allowed for comparisons between the academic performances of participating student groups.

Focus group discussion. Eight students from each of the four student groups were randomly selected for focus group discussions. Each of the students was asked if he or she would willingly participate in the discussion. They were also asked to sign, and have their parents sign, an informed consent form. Videotaping was used in addition to audio taping to facilitate the transcription of the focus group interviews (Bogdan & Biklen, 2003).

Focus groups were used because they "produce qualitative data that provide insights into the attitudes, perceptions and opinions of participants" (Krueger, 1994, p. 19). By assembling student discussion groups, the researchers sought to extract additional rich data not collected from student records or surveys. Students were asked questions related to college knowledge and financial aid, college aspirations and anticipations, and plans for college.

Analysis of Data

Several statistical analyses were performed including frequencies, ANOVAs, and regression. Demographic descriptions of each group provide a profile of the students participating in the study. In addition, focus group interview data were transcribed and analyzed for triangulation use.

To assess group differences in educational aspiration, college knowledge, and academic achievement, a series of ANOVAs were conducted to detect any differences in these variables among the AVID, GEAR UP, GEAR UP/AVID, and control groups.

Participation in college activities, college requirements information, and financial aid information were used as predictors of aspiration, 10th-grade math achievement, advanced course enrollment, and college knowledge. Separate regression analyses for each dependent variable were conducted to assess the unique effect of each of the predictors. Given the dichotomous nature of educational aspiration, a logistic regression model was used. Logistic regression was conducted to examine the variables that identify students participating in the intervention programs who aspired to postsecondary education and those who did not, and what variables are most likely to affect students' educational aspirations.

Focus group discussions were tape recorded and, in some instances, videotaped. All tapes were transcribed and coded using manual coding techniques. Once coded, coding categories (Bogdan & Biklen, 2003) were listed and data were inserted into one or more categories. These categories included college preparation, aspirations, anticipations, college knowledge, parent education, and participation. Several codes were also divided into subcodes to further break down the data (Strauss & Corbin, 1990). Some codes overlapped and were used in more than one category.

RESULTS

Descriptive statistics were compiled to describe overall characteristics, as well as the comparison of the groups. The four student groups are described in the following section.

Student Group Demographic Information

AVID group (AHS). A total of 39 AVID students were surveyed (one of the selected students was no longer attending AHS at the time of the survey). Fifty-eight percent were girls and 18% reported that they were migrant students. Thirty-eight percent of the AVID students reported that their mothers had less than a high school education, compared to 26% of their fathers. However, 20% of the AVID students reported that they did not know the education level of their mothers; 40% did not know the education level of their fathers. None of the AVID students' fathers had a bachelor's degree or higher; however, one of the AVID students (3%) reported that his or her mother had a bachelor's degree or higher. AVID students also reported that 43% of their siblings had attended or were currently attending college. When asked what language AVID students primarily spoke, 70% reported that it was English, 15% primarily spoke Spanish, and 13% spoke both languages. At home, 50% of the AVID students primarily spoke Spanish, 43% primarily spoke English, and 5% spoke both languages. Eighty percent of the AVID students reported that they were born in the

United States, 15% reported living in the United States for more than 5 years, and 3% had only been in the United States for 3 to 5 years.

GEAR UP group (GUHS). A total of 39 GEAR UP students were surveyed (one selected student did not complete the survey). Fifty-four percent were girls and only one student reported that he or she was a migrant student. Thirty-three percent of the GEAR UP students reported that their mothers had less than a high school education, compared to 39% of their fathers. However, 18% of the GEAR UP students reported that they did not know the education level of their mothers; 21% did not know the education level of their fathers. Two of the GEAR UP students (5%) reported that both their fathers and mothers had a bachelor's degree or higher. GEAR UP students also reported that 39% of their siblings had attended, or were currently attending, college. When asked what language GEAR UP students primarily spoke, 72% reported that it was English, 23% primarily spoke Spanish, and 3% spoke both languages. At home, 49% of the GEAR UP students primarily spoke Spanish, 44% primarily spoke English, and 5% spoke both languages. Sixty-nine percent of the GEAR UP students reported that they were born in the United States, 26% reported that they had lived in the United States for more than 5 years, and 3% had only been in the United States for 3 to 5 years.

GEAR UP/AVID group (GUHS). A total of 21 GEAR UP/AVID students were surveyed (one selected student was no longer in the program at the time of the survey). Sixty-two percent were girls and 19% reported that they were migrant students. Thirty-three percent of the GEAR UP/AVID students reported that their mothers had less than a high school education, compared to 38% of their fathers. However, 29% of the GEAR UP/AVID students reported that they did not know the education level of their mothers; 38% did not know the education level of their fathers. Five percent of the GEAR UP/AVID students reported that their mothers had a bachelor's degree or higher and 10% reported that their fathers had completed at least a 4-year college degree. The GEAR UP/AVID students also reported that only 19% of their siblings had attended or were currently attending college. When asked what language GEAR UP/AVID students primarily spoke, 57% reported that it was English, 38% primarily spoke Spanish, and 5% spoke both languages. At home, 71% of the GEAR UP/AVID students primarily spoke Spanish, 29% primarily spoke English, and none reported that they spoke both languages at home. Sixty-six percent of the GEAR UP/AVID students reported that they were born in the United States, 29% reported that they had lived in the United States for more than 5 years, and 5% reported that they had only been in the United States for 3 to 5 years.

Control group (AHS). A total of 40 control group students were surveyed. Fifty-six percent were girls and only 8% reported that they were migrant students.

Eight percent of the control group students reported that their mothers had less than a high school education, compared to 8% of their fathers. Fifteen percent of the control group students reported that their mothers had a bachelor's degree or higher and 8% reported that their fathers had completed at least a 4-year college degree. Twenty-eight percent of the control group students did not know the education level of their mothers and 23% did not know the education level of their fathers. Control group students also reported that 44% of their siblings had attended, or were currently attending, college. When asked what language control group students primarily spoke, 68% reported that it was English, 10% primarily spoke Spanish, and 21% spoke both languages. At home, only 8% of the control group students primarily spoke Spanish, 69% primarily spoke English, and 21% spoke both languages. One student reported that another language was spoken in the home. Ninety percent of the control group students reported that they were born in the United States and 10% had been in the country for at least 5 years.

By examining the differences and similarities between the four groups, researchers found that the Control group reported a higher percentage of educated mothers and fathers than the other three groups. However, a high percentage of students in all four groups reported that they did not know the education level of their parents. The GEAR UP/AVID group spoke primarily Spanish at home (71%), but only 8% of the control group spoke primarily Spanish at home. In addition, higher percentages of migrant students were found in the AVID group (18%) and the GEAR UP/AVID group (19%). Also, the control group had the highest percentage of students (90%) that were born in the United States, compared to the other three student groups. All demographic background information for the four student groups is summarized in Table 1.

In the four focus group discussions, students were asked if their parents went to college, even though this was reported on the student surveys. They were also asked what type of expectations their parents had for them to attend college and if their parents could afford to send them to college. Of the four groups, only the control group overwhelmingly reported that their parents were college-educated. In the other groups, only three students expressed that they had a relative or friend that had attended college. Regardless, students in all four groups mentioned that their parents wanted them to attend college. Representative comments from students regarding their parents' aspirations for them to attend college included:

My parents expect a lot from me. Since I am the oldest, they want me to set a high standard for my brother like they want me to go to college and they told me they'll do whatever they can to put me into college. (Control group male student)

My family members expect me to go to college because I'm the one who studies. I get As and Bs so I'm hoping to get a scholarship. (GEAR UP female student)

I'm definitely going to college and I plan to go to Texas Tech. Nobody in my family has gone to college and I want to be the first. (GEAR UP/AVID male student)

TABLE 1
Demographic Profile of Student Groups In Sample

	AVID (*n* = 39)	*GEAR UP* (*n* = 39)	*GEAR UP/AVID* (*n* = 21)	*Control* (*n* = 40)
Gender				
Boy	40	44	38	44
Girl	58	54	62	56
Mother's education				
< High school	38	33	33	8
High school or GED	35	23	29	23
Some college	3	18	5	21
Bachelor's degree or higher	3	5	5	15
No knowledge	20	18	29	28
Father's education				
< High school	26	39	38	8
High school or GED	20	26	10	28
Some college	13	8	5	21
Bachelor's degree or higher		5	10	8
No knowledge	40	21	38	23
Siblings attending college	43	39	19	44
Migrant students	18	3	19	8
Primary language spoken				
English only	70	72	57	68
Spanish only	15	23	38	10
Bilingual	13	3	5	21
Primary language spoken at home				
English only	43	44	29	69
Spanish only	50	49	71	8
Bilingual	5	5	—	21
Length of time living in the United States				
3—5 years	3	3	5	—
> 5 years	15	26	29	10
Born in the United States	80	69	66	90

Note. [a]*n* = 39. [b]*n* = 21. [c]*n* = 40.

When asked about the affordability of college, answers varied. With the exception of one student, all of the GEAR UP focus group students explained that their parents could not afford to send them to college. Control group students felt their parents could probably afford to send them to college, or they would find a way somehow to make it happen. Students in the AVID group and in the GEAR UP/AVID group also reported that their parents could not afford to send them to college. Typical comments include:

I know it (college) is going to be expensive, but I don't think we are able to get scholarshipsbecause a lot of us cannot pay that much money. I don't know. I guess I'll have to work. (GEAR UP female student)

I think it costs like between one thousand and two thousand [dollars] each semester, and without counting the books. That's like another two hundred and fifty. (GEAR UP male student)

I think my parents can afford it. There are a lot of opportunities. They want me to get a scholarship, so they don't have to worry about it. (Control group female student)

Educational Expectations and Anticipations

The researchers measured educational expectations and anticipations of the four groups of students through a set of six items on the survey. No significant differences were found among the AVID, GEAR UP, GEAR UP/AVID, and control groups. When looking at the percentage of students who provided a college expectation/anticipation response for a given survey item, the GEAR UP/AVID group was the only group that was markedly different (see Table 2). Compared to the other groups, fewer GEAR UP/AVID students think they will get or be satisfied with a college education (Items 1 and 2).

To distinguish high educational expectation/anticipation from moderate or low expectation/anticipation, a cut-point was set at 4 on the 0–6 scale, where students

TABLE 2
Percent of Students Providing an Educational Expectation and Anticipation Response by Item

Questions	*AVID*	*GEAR UP*	*GEAR UP/AVID*	*Control (%)*
As things stand now (realistically), how much education do you think you will get?	66	73	52	68
What is the minimum level of education with which you would be satisfied?	58	51	19	66
What activity most likely will take the largest share of your time in the year after you leave high school?	89	95	85	90
Do you plan to go to college at some time in the future?	97	100	100	100
If yes, to what college do you intend to apply?	90	79	81	77
Will you be disappointed if you don't graduate from college?	87	97	95	95
Percent of students exhibiting high educational expectations and anticipations (based on scale total)	83	80	79	83

scoring 4 or greater were classified as having high educational expectations/anticipations. As seen at the bottom of Table 2, the AVID group had the largest percent of students exhibiting high expectations/anticipations.

Several students articulated their thoughts in the focus group discussions about their concrete plans for college. Several students reported that they would have to work to pay their way through college, and others knew how many years it would take for them to complete their desired field of study:

> *I'm pursuing physical education. And just like any discipline, I have to go for 4 years, then if I want to get my master's degree, I'll have to go more years.* (AVID female student)
>
> *I will definitely go to a 4-year college because I think when you go like to get a job or whatever, if there are a lot of people who want to get that job, it depends on how much education you have. So the more education you have, the better chance you have of getting the job you want.* (GEAR UP/AVID female student)
>
> *I think it'll be difficult to tackle school and work at the same time. It's really a stressful schedule. I don't really want to work while I'm going to college, but I might have to.* (Control group female student)

ANOVA

It was hypothesized that the three groups that participated in the two college preparatory programs would significantly differ from the control group in the areas of academic achievement, educational aspirations, and their knowledge about college. Analysis of variance (ANOVA) was used to test the differences between the four groups in these three areas.

A summary of the means among the student groups concerning educational aspirations, college knowledge, and academic achievement (math scores) is shown in Table 3. Results from the series of ANOVAs comparing the dependent variables are shown in Tables 4 through 7.

Advanced course enrollment. Compared to the GEAR UP, GEAR UP/AVID, and control groups, students in the AVID group are significantly more in-

TABLE 3
Dependent Variable Means for Student Groups

	AVID	*GEAR UP*	*GEAR UP/AVID*	*Control*
Advanced course enrollment[a]	4.58	2.77	1.71	3.36
Educational aspiration[b]	0.92	0.84	0.8	0.82
College knowledge[c]	6.44	5.34	6.00	5.00
Math academic achievement[d]	80.00	80.70	75.90	81.50

Note. [a]value range: 0 – 5. [b]Value range: 0 – 1. [c]Value range: 0 – 10. [d]Value range: 0 – 100.

TABLE 4
Summary of ANOVA Analysis For Student Groups
by Advanced Course Enrollment

	Advanced Course Enrollment		
	n	*M*	*SD*
AVID group	38	4.58	0.72
GEAR UP group	39	2.77	1.63
GEAR UP/AVID group	21	1.71	1.31
Control group	39	3.36	1.65

Source	*Sum of Squares*	*df*	*Mean Squares*	*F-ratio*
Between groups	126.01	3	42.01	21.7*
Error	257.45	133	1.94	—

Note. $*p < .001$.

TABLE 5
Summary of ANOVA Analysis For Student Groups
by Educational Aspiration

	Educational Aaspiration		
	n	*M*	*SD*
SAVID group	38	0.92	0.27
GEAR UP group	37	0.84	0.37
GEAR UP/AVID group	20	0.80	0.41
Control group	38	0.82	0.39

Source	*Sum of Squares*	*df*	*Mean Squares*	*F-ratio*
Between groups	0.29	3	0.097	0.751
Error	16.70	129	0.129	—

volved in advanced course enrollment (number of pre-AP courses) as shown in Table 4. Also, though there was no difference between the GEAR UP and control groups, both enrolled in more advanced courses than the GEAR UP/AVID group.

Focus group participants were also asked about the kinds of classes they were enrolled in, and if they thought the classes they were taking were sufficient to prepare them for college. Students in each group reported taking advanced courses, mostly pre-AP, though not all students were enrolled in pre-AP courses.

I think AVID is preparing me academically. The binders really keep us organized and we have to take Cornell notes in all of our classes. (GEAR UP/AVID female student)

TABLE 6
Summary of ANOVA Analysis For Student Groups by College Knowledge

	College Knowledge		
	n	*M*	*SD*
AVID group	39	6.44	3.20
GEAR UP group	38	5.34	2.66
GEAR UP/AVID group	21	6.00	2.79
Control group	39	5.00	2.92

Source	*Sum of Squares*	*df*	*Mean Squares*	*F-ratio*
Between groups	46.73	3	15.60	1.83
Error	1132.10	133	8.51	

TABLE 7
Summary of ANOVA Analysis For Student Groups
by 10th-Grade Math Achievement

	10th Grade Math Achievement		
	n	*M*	*SD*
AVID group	38	80.00	9.67
GEAR UP group	39	80.70	7.09
GEAR UP/AVID group	20	75.90	8.95
Control group	39	81.50	8.66

Source	*Sum of Squares*	*df*	*Mean Squares*	*F-ratio*
Between groups	438.16	3	146.05	1.98
Error	9734.77	132	73.75	

> *If you're gonna try to graduate distinguished, you need four DAP [Distinguished Achievement Plan] measures. So I plan to take the AP tests.* (Control group female student)

Educational aspirations. Data presented in Table 5 indicate that the AVID group has higher educational aspirations than any other group, yet there were no statistically significant differences. One survey item was used to measure aspirations, which solicited the type of education a student aspires to obtain.

Student focus group participants were asked about their aspirations for college. Students in each of the four groups reported having aspirations for attending 4-year colleges, and mentioned Texas colleges and universities such as Texas Tech, Texas A&M, Our Lady of the Lake, and The University of Texas Pan American.

Several students had thought about the professions they were interested in but did not always know what classes to take and/or how many years of college they would need for a particular profession.

Well, I am going to go to college, but I am not really sure what for. I want to be a mailman—that sort of thing. They make good money and they have their free hours. (GEAR UP male student)

I feel like I am more responsible, organized, and mature in what I do. I can see the future more now! will definitely apply to 4-year colleges. (AVID female student)

College knowledge. Researchers also sought to determine whether the groups participating in the college preparatory programs had a higher level of college knowledge than the Control group. As illustrated in Table 6, there is little difference among the groups; however, the AVID group had the highest level of college knowledge, followed by the GEAR UP/AVID group.

Researchers expected GEAR UP and AVID focus group participants to exhibit more knowledge about college than control group participants in the focus group discussions. Although GEAR UP and AVID students discussed aspects of the two programs that helped them gain knowledge about college, the control group also expressed such knowledge and ideas about where to acquire more knowledge about college. GEAR UP students mentioned that most of the information they received about college was from relatives who had been through college. GEAR UP and AVID focus group participants also mentioned the importance of tutoring and valued the information they received about college from their tutors.

Like in some classes, you need certain stuff in order to get into college. You need to have like a certain GPA level. Last year somebody talked to us about that a lot, so basically I know what I have to do. (Control group female student)

Our GEAR UP counselor gives us information about college. Like there is a college in Brownsville, and another one in Kingsville. (GEAR UP/AVID male student)

I think GEAR UP has been more helpful than AVID because it gives you more information about college. (GEAR UP/AVID female student)

Math achievement. Although math performance was lower for the GEAR UP/AVID group than the other three groups, the results were not statistically significant. Table 7 illustrates the mean 10th-grade math scores of the four groups. Although the control group had a slightly higher mean score, both the AVID and GEAR UP groups' math scores were higher than the GEAR UP/AVID group's.

Focus group discussions revealed that students were conscious of the importance of a rigorous curriculum, particularly in math.

Right now I'm taking Algebra II, and I'm preparing next year for Pre-Cal and then Calculus, and that is one a year. It is part of collegeso it's helping us to know how it's going to be in college. (GEAR UP female student)

I think math is important for college the AVID teachers also help us with that, and if we need help, they get us tutors. They [the AVID teachers] are teaching us to be more responsible and do our homework. (AVID female student)

Regression

A multiple regression procedure was conducted to predict academic achievement and college knowledge by participation in college activities, college requirements information, and financial aid information. The significant results of the multiple regression analysis are shown in Table 8. As hypothesized, participation in the programs made a contribution to advanced course-taking behavior. It accounts for 7% of the variance in advanced course-taking behavior. However, college requirements information and financial aid information did not predict advanced course-taking behavior. Furthermore, none of the independent variables were shown to be good predictors of achievement in math.

College requirements information is a significant predictor of college knowledge (see Table 8). Consistent with the original hypothesis, the frequency with which a student talks with others about college requirements is positively associated with knowledge and awareness of college preparation. The effect of college participation activities and financial aid information, however, was not supported. Also, logistic regression analyses demonstrated that none of the independent variables contributed to the prediction of educational aspirations.

All four focus groups reported that they had been on field trips to colleges, and several of the groups reported attending college nights, camps, or other college activities.

Last year before we went on the field trips, we had to contact the colleges first to get information about college life and what the community was like. It made us think more about what it was really like to go to that college. (GEAR UP female student)

TABLE 8
Participation in College Activities, College Requirement Information, and Financial Aid Information as Predictors of Advanced Course Enrollment and College Knowledge

	Advanced course enrollment	*College knowledge*
Predictor variable	(R^2 = .066)	(R^2 = .126)
Participation in activities	0.26*	ns
College requirement information	ns	0.36**
Financial aid information	ns	ns

Note. * $p < .05$; ** $p < .001$; ns = non-significant.

GEAR UP has a variety of camps. They have health and science. They have engineering. They have math. They help us likelast year they had basketball camp at Pan AM and we got to see how college life was like. (GEAR UP female student)

DISCUSSION

The purpose of this study was to investigate if a difference exists in the college preparation of students who participate in preparatory programs and those students who do not. It was hypothesized that AVID and GEAR UP students would exhibit higher levels of academic preparation, educational aspirations, educational expectations and anticipations, and college knowledge. These preliminary findings are inconclusive. Only the AVID group was significantly better in academic preparation than the control group; the other two groups that participated in a college preparatory program were not. AVID students were more involved in advanced course enrollment than the other groups. Although statistically insignificant, college knowledge was higher for all of the college preparatory groups. It is also encouraging that participation in college-related activities may predict advanced course enrollment and knowledge about college.

Some caution must be used when interpreting the results. First, the small sample size of the groups might have compromised the results. Unfortunately, the GEAR UP/AVID group is very small ($n = 21$). This is a limitation for the researchers because this group represented the entire 10th-grade GEAR UP/AVID population at GUHS.

Second, the majority of the students in the intervention programs are characterized as coming from low-income families with little college experience and limited education: Their parents are less educated than parents from the control group. Taking this into consideration, researchers conducted additional analyses comparing students whose parents had high school diplomas or less with those whose parents had more than a high school education. AVID and GEAR UP groups with parents who have high school diplomas or less aspired more to get a college degree than the other two groups. The control group exhibited the lowest educational aspirations.

Similar results are noted for college knowledge. Students whose parents have a lower level of education but participate in the college preparatory programs have a higher level of college knowledge than control group students. However, there is no difference among groups with regard to academic achievement and parents' level of education.

Despite the lack of differences in educational expectations and anticipations between the groups, the primary purpose for creating this scale was to establish baseline data for 10th-grade students that can later be compared to expectation/anticipation data in the 12th grade. Once 12th-grade data are retrieved, researchers will use Adelman's (1999) anticipation scale to assess differences in the four groups

over time. It is hypothesized that as graduation draws nearer for students participating in college preparatory programs, they will have more concrete plans for college than students not participating in such programs.

Focus group data also revealed some clear-cut differences between the four groups. The control group participants reported that their parents had college educations, and their enrollment in advanced coursework was high, yet their aspirations for attending 4-year colleges were lower than the other three groups. In addition, the AVID focus group spent much of their discussion on college preparatory strategies such as Cornell notes and tutoring, whereas the other three groups did not. It was interesting to note that the GEAR UP group reported using Cornell notes, an AVID strategy, in some of their classes.

The researchers intend to follow the progress of these four student groups until they graduate from high school. This study served as a baseline for additional work that will be conducted on GEAR UP and AVID and their impact on academic preparation, educational aspirations, educational anticipations and expectations, and college knowledge.

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REFERENCES

Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns and bachelor's degree attainment.* Washington, DC: US. Department of Education, Office of Educational Research and Improvement.

Asera, R. (1997, June). *Research and analysis of AVID—1997.* Retrieved July 28, 2003, from http://www.avidonline.org/info/?ID=102

Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (1980). *Monitoring the future: Questionnaire responses from the nation's high school seniors, 1978.* Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan.

Bempechat, J. (1998). *Against the odds: How "at risk" children exceed expectations.* San Francisco: Jossey Bass.

Berkner, L. & Chavez, L. (1997). *Access to postsecondary education for the 1992 high school graduates* (NCES Report No. 98–105). Washington, DC: Office of Educational Research and Improvement, U.S. Department of Education.

Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods.* Boston: Allyn & Bacon.

Burkheimer, G. J., Riccobono, J., & Wisenbaker, J. (1979). *Final Report: Evaluation study of the Upward Bound program—A second follow-up.* Research Triangle Park, NC: Research Triangle Institute.

Cabrera, A. F., & La Nasa, S. (2000). Understanding the college-choice process. *New Directions For Institutional Research, 107,* 5–23.

Campbell, R. T. (1983). Status attainment research: End of the beginning or beginning of the end? *Sociology of Education, 56,* 47—62,

Campbell, D. T., & Stanley, J.C. (1963). *Experimental and quasi-experimental designs for research.* Chicago: Rand McNally.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361–376). Thousand Oaks, CA: Sage.

Gándara, P. (2002). A study of High School Puente: What we have learned about preparing Latino youth for postsecondary education. *Educational Policy, 16,* 474–495.

Gándara,.P., &Bial, D. (2001). *Paving the way to postsecondary education: K–12 intervention programs for underrepresented youth.* Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

Gándara, P., & Moreno, J. F. (2002). Introduction: The Puente Project: Issues and perspectives on preparing Latino youth for higher education. *Educational Policy, 16,* 463–473.

Greene, J., & Forster, G. (2003). *Public hgh school graduation and college readiness rates in the United States* (No. 3). XXCITY, ST: Center for the Civic Innovation at the Manhattan Institute.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed method evaluation designs. *Educational Evaluation and Policy Analysis, 11,* 255–274.

Greene, J. P. (2001). *High school graduation rates in the United States.* XXCITY, ST: Manhattan Institute for Policy Research.

Hauser, R. M., & Anderson, D. K. (1991). Post-high school plans and aspirations of Black and White high school seniors: 1976–86. *Sociology of Education, 64,* 22–30.

Iohnson, S. T. (1992). Extra school factors in achievement, attainment, and aspiration among junior and senior high school age African American youth. *Journal of Negro Education,61,* 99–119.

Kao, G., & Tienta, M. (May 1998). Educational aspirations of minority youth. *American Journal of Education 106,* 349–384.

Ketelsen, J. L. (1994). *Jefferson Davis feeder school project.* Houston, TX: Tenneco Corporation Project GRAD.

King, J. E. (1996). *The decision to go to college: Attitudes and experiences associated with college attendance among low-income students.* Washington, DC: The College Board.

Krueger, R. A. (1994). *Focus groups: A practical guide for applied research.* Thousand Oaks, CA: Sage.

Mahoney, J. S., & Merritt, S. R. (1993). Educational hopes of black & white high school seniors in Virginia. *Journal of Educational Research, 87,* 31–38.

Mehan, H., Villanueva, I., Hubbard, L., & Lintz, A. (1996). *Constructing school success: The consequences of untracking low-achieving students.* Cambridge, UK: Cambridge University Press.

McAdoo, M. (1998). Project GRAD's strength is in the sum of its parts. *Ford Foundation Report, 29*(2), 8–11.

McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity.* Albany, NY: SUNY Press.

Meyers, D., & Schirm, A. (1999). *The impacts of Upward Bound: Final report for phase I of the national evaluation.* Washington, DC: Mathematica Policy Research.

Morgan, D. (1998). Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research, 8*, 362–376.

National Center for Educational Statistics. (2001). *High school academic curriculum and the persistence path through college*. Retrieved on December 21, 2006, from http://nces.ed.gov/pubIserch/pubsinfo.asp?pubid=2001163

Perna, L. (2000). Racial and ethnic groups differences in college enrollment decisions. *New Directions for Institutional Research, 107*, 65–83.

Perna, L. & Swail, W. (2001). Pre-college outreach and early intervention. *Thought & Action, 17*(1), 99–110.

President's Advisory Commission on Educational Excellence for Hispanic Americans. (2003). *Final Report: From risk to opportunity: Fulfilling the educational needs of Hispanic Americans in the 21st century*. Washington, DC: Author.

Santoli, S. P. (2002). Is there an advanced placement advantage? *American Secondary Education, 30*(3), 23–35.

Slavin, R. E. & Calderon, M. (2001). *Effective programs for Latino students*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Steckler, A., McLeroy, K. R., Goodman, R. M., Bird, S. T., & McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education Quarterly, 19*(1), 1–8.

St. John, E. P. (1991). What really influences minority attendance? Sequential analysis of the high school and beyond sophomore cohort. *Research in Higher Education, 23*, 141–158.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: CA: Sage.

Swanson, M. C. (2000). Rigor with support: Lessons from AVID. *Leadership, 30*(2), 26–29.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Texas Education Agency. (2003). *Academic Excellence Indicator System (AEIS) Reports*. Retrieved on November 24, 2004, from http://www.tea.state.tx.us/perfreport/aeis/

U.S. Census Bureau (2002). *Educational attainment in the United States, March 2002, detailed tables*. Retrieved on December 21, 2006, from http://www.census.gov/population/www/socdemo/education/ppl-169.html

Wahl, K. H., & Blackhurst, A. (2000). Factors affecting the occupational and educational aspirations of children and adolescents. *Professional School Counseling, 3*, 367–374.

Warburton, E., Bugarin, R., & Nunez, A. (2001). Bridging the gap: Academic preparation and postsecondary sources of first-generation students. *Education Statistics Quarterly, 3*(3), 73–77.

Watt, K. M., Powell, C., Mendiola, D. M., & Cossio, G. (2006). Schoolwide impact and AVID: How have selected Texas high schools addressed the new accountability measures? *Journal of Education for Students Placed at Risk, 11*, 57–73.

Watt, K. M., Yañez, D., & Cossio, G. (2002). AVID: A comprehensive school reform model for Texas. *National Forum of Educational Administration and Supervision Journal, 19*(3), 43—59.

Weiss, S. (2001). High school curriculum. *Progress of Educational Reform 1999–2001, 3*(1), XX–XX.

Wells, J. (1981). *SCORE. Final report for ESEA Title IVC*. Sacramento, CA: California Department of Education.

Williams, T. (1972). Educational aspirations: Longitudinal evidence on their development in Canadian youth. *Sociology of Education, 45*, 107–113.