

University of Texas Rio Grande Valley

ScholarWorks @ UTRGV

Theses and Dissertations - UTB/UTPA

12-1996

A study of factors on the performance of the Texas Academic Skills Program Test

Billy B. Watkins

Follow this and additional works at: https://scholarworks.utrgv.edu/leg_etd



Part of the [Higher Education Commons](#), and the [Public Affairs, Public Policy and Public Administration Commons](#)

**A Study of Factors on the Performance of
the Texas Academic Skills Program Test**

by

Billy B. Watkins

**A thesis presented in partial fulfillment
of the requirements for the degree of**

Master of Public Administration

**in the Department of Political Science
of Social and Behavioral Sciences**

The University of Texas-Pan American

1996

Approvals:
Committee:

Dr. Joe R. Hering
Chair

Oct. 1, 1996
Date

Ronald W. Keel
Member

1 October 1996
Date

My [Signature]
Member

Oct 1, 1996
Date

Program Chairman:

Dr. Joe R. Hering

Oct. 1, 1996
Date

Dean:

James W. Lamm
College of Social and Behavioral Sciences

Oct. 1, 1996
Date

To Murphy

Watkins, Billy B., A Study Of Factors On The Performance Of The Texas Academic Skills Program Test.
Master of Public Administration (MPA), December, 1996,
75 pp., 35 tables, references, 57 titles.

At least thirty percent of students who enter Texas public higher education each year have basic skills deficiencies and cannot perform effectively in college. The TASP Test was developed to identify these students. Moreover, this test must be passed in order to obtain a degree from a Texas public institution.

A survey of 150 entering freshmen from the University of Texas-Pan American was examined to identify variables that influence student performance on the TASP Test.

Chi-square tests uncovered academic, socioeconomic, and institutional bivariate relationships with TASP performance. Multiple regression analysis indicated that academic variables primarily predicted TASP performance.

ACKNOWLEDGMENTS

This report could not have been completed without the support and encouragement of my family and friends. The guidance of the thesis committee members, Dr. Jose Hinojosa, Dr. Gary Tschoepe, and Dr. Robert Wrinkle, was invaluable. Finally, a note of appreciation is given to Dr. Santiago Silva and the staff of the Counseling/ Advisement Center of the University of Texas-Pan American for their cooperation and assistance throughout this process.

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vi
CHAPTER	
1. INTRODUCTION	1
2. LITERATURE REVIEW	16
3. METHODOLOGY	36
4. RESULTS	48
5. DISCUSSION	59
BIBLIOGRAPHY	67
APPENDIX	74

LIST OF TABLES

Table	Page
1-1: Percentage of Students by Ethnicity Passing TASP Reading Section (1990-1994).....	6
1-2: Percentage of Students by Ethnicity Passing TASP Math Section (1990-1994).....	7
1-3: Percentage of Students by Ethnicity Passing TASP Writing Section (1990-1994).....	7
1-4: Percentage of Students by Ethnicity Requiring Remediation in Reading, Math, and Writing (1989-1995).....	8
1-5: Percentage of Exemptions From TASP by Ethnicity.	8
1-6: Percentage of Tenth Grade Students Passing TAAS by Ethnicity and Wealth (1993-1995).....	9
2-1: 1994 SAT Mean Scores of College-Level Seniors by Ethnicity.....	17
2-2: Percentage of High School Graduates Not Enrolled in College and For High School Dropouts That Are Employed Based on Ethnicity (1993).....	19
2-3: Median Annual Earnings Based on Education & Ethnicity (1994).....	19
2-4: Percentage of 25-34 Year Olds Receiving Income From AFDC Based on Education & Ethnicity (1992).....	19
2-5: Comparison of High & Low State Spending Controlled For Percentage of Seniors Taking SAT Test (1990).....	24
2-6: Percentage of Enrollment in Higher Education Based on Ethnicity (1983).....	27
2-7: Higher Education Appropriations Per Capita by Area.....	29

2-8:	Degree Programs By Area Per 100,000 Residents (1984).....	29
3-1:	Summary of 1990 Census Tracts by Median Income.....	41
3-2:	Summary of 1990 Census Tracts by Median Home Value.....	42
3-3:	Summary of 1990 Census Tracts by Education Level.....	42
3-4:	Summary of School Districts by Institutional Factors.....	44
3-5:	Contingency Table Example of Parental Income....	45
3-6:	Regression Equation Used In This Study.....	47
4-1:	Student College Grade Point Average.....	49
4-2:	Student ACT Composite Score.....	49
4-3:	Student Remediation Status.....	50
4-4:	Student Admissions Status.....	50
4-5:	Student Academic Status.....	51
4-6:	Student Ethnicity.....	51
4-7:	Parental Income.....	52
4-8:	Parental Home Value.....	52
4-9:	Parental Education Level.....	53
4-10:	District Taxable Value Per Pupil.....	54
4-11:	District TAAS Passing Rate.....	54
4-12:	District Teaching Experience.....	55
4-13:	District Teaching Service.....	55
4-14:	District Dropout Rate.....	55
4-15:	Regression Variables in Predicting TASP Scores.....	56

CHAPTER 1

INTRODUCTION

There is a plethora of problems in public education in the United States. Drug use and violence, high dropout rates, high costs of college, access to equal opportunities, and low performance of students are major concerns. According to a recent survey, 60 percent of parents would not send their children to public schools, and 50 percent concluded that a high school diploma is not tantamount to mastering basic skills (Funk & Wagnalls, 1996, 168).

Basic skills underachievement is a growing problem at the college entry level. Since public education is committed to producing educated and informed citizens, which is vital to a nation's economy and well-being, public officials must address this problem.

However, some public officials appear to be retreating from this goal. Congress attempted to reduce federal funding of education programs. Some members of Congress proposed eliminating the Department of Education and giving control over a number of education programs designed to aid poor and disadvantaged students to the states. (Funk & Wagnalls, 1996, 168).

Yet, not all states have the capacity to administer these programs effectively due to budget cutbacks. To remedy an \$11 billion deficit, California had cut education funding by making over \$700 million in appropriations into loans that school districts have to repay (Funk & Wagnalls, 1996, 152).

In Texas, the economy has diversified to include technology; however, a well-educated workforce is essential to compete in the global market. Unfortunately, over 30,000 Texas high school graduates who enter college are deficient in reading, writing, or mathematics. Texas policymakers decided to place basic skills deficiencies on the public agenda (THECB, 1995).

Background

In 1985, the Texas Higher Education Coordinating Board appointed the Committee on Testing to determine how many Texas students entering college were inadequately prepared for college-level work and to explore the feasibility of creating a basic skills test for entering students. The committee reported that the problem facing Texas students could no longer be ignored. After holding several public hearings and visiting other states to study their basic skills testing programs, the committee issued a report entitled, A Generation of Failure: The Case For Testing and Remediation in Texas Higher Education. The committee estimated that at least 30 percent of the students who enter Texas public higher education each year cannot read, write,

or compute at a level needed to perform effectively in higher education. Some of these college students leave higher education because they lack needed skills, not because they lack ability (THECB,1995).

The Committee on Testing recommended that Texas adapt a diagnostic test for the reading, writing, and mathematics skills needed to perform effectively in college. They also suggested that the test be administered after admissions decisions had been made; therefore, a move to admit students according to their performance on the skills test would be avoided. Another recommendation called for all institutions to develop both advising programs for all students and remedial programs to meet the needs of underprepared students (THECB,1995).

In 1986, the recommendations provided by the Committee on Testing were adopted by the coordinating board and sent to the Texas Legislature. During the 1987 legislative session, the recommendations became law under Section 51.306 of the Texas Education Code (THECB,1995).

Summary of the Texas Education Code

The legislation that created the Texas Academic Skills Program Test (TASP) incorporated all of the significant Committee on Testing recommendations:

All students in the following categories who enter public institutions of higher education in the Fall of 1989 and thereafter must be tested for reading, writing, and mathematics skills:

1. All full-time and part-time freshmen enrolled in a certificate or degree program;

2. Any other student, prior to the accumulation of nine or more semester credit hours or the equivalent and;
3. Any transfer student with fewer than 60 semester credit hours or the equivalent who has not previously taken the tests (TEC,1995,Sec.51.306 (B)).

The examination cannot be used for admissions purposes, but it must be taken before the student accumulates nine semester credit hours of coursework.

If skill deficiencies are identified, the student is required to participate in continuous remediation until he or she masters all sections on the examination (TEC,1995, Sec.51.306(E)). The Texas Education Code exempts students from the TASP Test based on exceptionally high performance on either the Texas Assessment of Academic Skills Test(TAAS), the Scholastic Assessment Test(SAT), or the American College Test(ACT) (TEC,1995,Sec.51.306(M)).

The exemptions are based on the following scores:

1. ACT English:22/ACT Math:22/ACT Composite:26;
2. SAT Verbal:550/SAT Math:550/SAT Composite:1180;
3. TAAS Writing:1780/TAAS Reading:89/TAAS Math:86
(UTPA,1995,6).

Development of the TASP Test

More than 3,000 Texas higher education faculty and administrators were involved in the development of the TASP Test. Three content committees- one each for reading, writing, and mathematics- determined which skills should be tested, reviewed test materials for bias, and reviewed test items for accuracy, appropriateness, and skill. Through

surveys, several thousand faculty were asked if the skills to be tested represented preparation necessary for success in an undergraduate degree or certificate program. Results of the validation survey indicated the chosen skills were necessary. The items were field-tested on freshmen students attending public colleges and universities (THECB,1995).

Total Components and Scoring

The reading section includes 300-700 word reading selections similar to those found in course materials that students are likely to encounter during their first year in college. Students respond to approximately 40 multiple-choice questions from 10-12 reading selections (NES,1994,5).

The mathematics section consists of 50 multiple-choice questions covering fundamental mathematics, algebra, and geometry. Test questions focus on a student's ability to perform mathematical operations and solve problems. Appropriate formulas are provided to students for use in performing some calculations (NES,1994,6).

The writing section consists of two parts- 40 multiple-choice questions and a writing sample. The writing section is based primarily on the essay; the multiple-choice section assesses a student's ability to recognize various elements of effective writing. Writing assignment topics are similar to typical in-class essay assignments (NES,1994,7).

The passing scores are 230 for the reading and mathematics sections and the passing score for the writing section is 220 (NES,1994,18). The TASP Test is administered

six times per year at more than 100 testing centers across the state. A total of five hours is given for a test session. If a student is retaking the examination, only those sections failed must be repeated. The total testing time is provided regardless of the number of sections they choose to attempt (THECB,1995).

Statement of the Problem

According to the Annual Report on the TASP and the Effectiveness of Remediation, statewide data reveal a pattern regarding the TASP Test. A five year comparison of students by ethnicity compare passing rates; whites display a higher percentage of passing this test than other ethnic groups. The following tables demonstrate:

Table 1-1: Percentage of Students by Ethnicity Passing TASP Reading Section (1990-1994)

Year	Whites	Blacks	Hispanics
1990	94%	72%	80%
1991	93%	73%	80%
1992	93%	74%	80%
1993	93%	74%	80%
1994	88%	64%	70%

Source: Texas Higher Education Coordinating Board, Annual Report on the TASP and the Effectiveness of Remediation, (THECB,1995).

Table 1-2: Percentage of Students by Ethnicity Passing TASP Math Section (1990-1994)

Year	Whites	Blacks	Hispanics
1990	84%	55%	69%
1991	84%	59%	71%
1992	83%	57%	68%
1993	83%	58%	70%
1994	73%	41%	56%

Source: Texas Higher Education Coordinating Board, Annual Report on the TASP and the Effectiveness of Remediation, (THECB, 1995).

Table 1-3: Percentage of Students by Ethnicity Passing TASP Writing Section (1990-1994)

Year	Whites	Blacks	Hispanics
1990	86%	61%	69%
1991	89%	66%	73%
1992	89%	68%	75%
1993	90%	69%	75%
1994	86%	63%	70%

Source: Texas Higher Education Coordinating Board, Annual Report on the TASP and the Effectiveness of Remediation, (THECB, 1995).

In addition, the report examines the ethnic composition of students who were required to participate in remedial programs due to failing the TASP Test. The outcome displays more blacks and Hispanics in remediation than whites.

Table 1-4: Percentage of Students by Ethnicity Requiring Remediation in Reading, Math, and Writing (1989-1995)

Subject	Whites	Blacks	Hispanics
Reading	40%	71%	62%
Math	26%	61%	51%
Writing	33%	68%	60%

Source: Texas Higher Education Coordinating Board, Annual Report on TASP and the Effectiveness of Remediation, (THECB, 1995).

Moreover, the issue of student exemptions from the TASP Test is addressed. As Table 1-5 demonstrates, white students account for a majority of TASP Test exemptions.

Table 1-5: Percentage of Exemptions From TASP by Ethnicity

Whites.....	78%
Blacks.....	2%
Hispanics.....	8%
Other.....	12%

Source: Texas Higher Education Coordinating Board, Annual Report on TASP and the Effectiveness of Remediation, (THECB, 1995).

These patterns are also observed in the secondary education level. A recent headline from The Monitor read, "TAAS Results Show Ethnic Disparities." The story provides an analysis of TAAS results from the 1992-1993 school year. The results are that whites performed twice as well as blacks

and Hispanics. While 9 out of 10 whites passed, 2 of 5 blacks and 1 of 3 Hispanics failed. 54 percent of high school juniors passed TAAS, but the passing rate was a third less for students who qualified for free or reduced-price lunches. In districts that had at least \$250,000 in taxable property per student, the average passing rate for low-income students was 44 percent, compared with an overall passing rate of 60 percent. In high schools that were at least 80 percent white, the passing rate was 71 percent for whites and 44 percent for Hispanics. In high schools that were at least 80 percent Hispanic, 36 percent of Hispanics passed the TAAS (Monitor, 1995, 1A).

According to statewide Spring 1993-1995 TAAS results of tenth grade students, categories of wealth and ethnicity are compared.

Table 1-6: Percentage of Tenth Grade Students Passing TAAS by Ethnicity and Wealth (1993-1995)

Groups	Spr 93	Spr 94	Spr 95
Whites	66%	67%	70%
Blacks	29%	29%	32%
Hispanics	34%	35%	37%
Economically Disadvantaged	31%	33%	35%

Source: Texas Education Agency, TAAS Statewide Results, (TEA, 1995).

Policy Questions

According to the Texas Education Code, the mission

of the public education system is:

to ensure that all Texas children have access to a quality education that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation (TEC, 1995, Sec. 4.001(A)).

The analysis of TASP scores suggests that this mission is not being met. In developing public policy of TASP, did the Texas Legislature neglect other factors in the causes of student underachievement? Does the background of a student play a role in TASP performance? Does TASP failure predict academic difficulty in post-secondary institutions? Do characteristics of a high school district influence student achievement? What public programs or initiatives can improve academic performance?

Enrollment-Driven Schools

One viewpoint that could account for the population of student underachievement in post-secondary education is stated in the article, "Inflated Grades, Inflated Enrollment, and Inflated Budgets: An Analysis and Call for Review at the State Level" by J.E. Stone.

Stone's thesis is that grade inflation has led to enrolment inflation and enrollment inflation has led to budget inflation (Stone, 1995). Grade inflation is an increase in reported grades unwarranted by student achievement.

It is suggested that the cause of grade inflation is enrollment-driven funding. Public institutions of higher

education formerly competed for state funding dollars through political lobbying, but now they compete by seeing who can enroll the most students (Stone,1995). Enrollment-driven funding has made grade inflation bureaucratically profitable to the detriment of student learning and development (Stone, 1995).

The view is that causes of grade inflation and budget inflation flow from the pursuit of educational priorities operationally determined from an administrative perspective; administrative performance is the ability to maintain or increase one's budget (Stone,1995).

Consequently, one suspected cause of grade inflation is the admission of increasing numbers of poorly prepared students. Most poorly prepared students are unlikely to exceed the average levels of performance exhibited by their better prepared peers. If expectations are not lowered, many students fail, enrollment is lowered, and student satisfaction is decreased. Conversely, lower expectations make passing grades and continued enrollment attainable for all (Stone,1995).

An Alternative Viewpoint

A former TASP coordinator for the University of Texas-Pan American applies Stone's thesis to secondary schools because, "...high schools get red flags and reduced funding for lots of failures" (Olivarez,1996).

However, she believes that TASP and TAAS scores are an indication of other problems occurring in junior-high

and high schools because, "something is wrong when someone getting a high-school diploma can't pass a tenth-grade level exam" (Olivarez,1996).

A growing number of educators and researchers- even those who support standardized tests- say performance on the largely multiple-choice exams might reflect a student's socioeconomic status and the school's wealth as much as the student's comprehension of basic academic concepts (Monitor,1994,1A).

Purpose and Significance of the Study

The purpose of this research is to discover if any relationships exist between TASP performance and the background of a student. Specifically, there are three purposes:

1. to see if students who fail the TASP Test will exhibit poor academic performance;
2. to examine if minority students and students from low socioeconomic backgrounds will exhibit poor performance on the TASP Test; and
3. to discover if students who produce high TASP Test scores come from school districts that display high measures of academic performance, teacher stability, and wealth.

A focus on these issues by the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Legislature may identify at-risk students and create programs designed to improve student achievement.

The significance of this report is rooted in two requirements of TASP policy. One provision is the sixty-hour rule. According to the TASP Policy Manual, students may not enroll in any upper-division courses until their test

results meet or exceed the minimum standards in all test scores (THECB,1995,54). Even though students may continue to take and accumulate lower-division courses past the sixty-hour limit, they are not allowed to graduate with a degree or certificate until they have passed the TASP Test (THECB, 1995,55).

The second provision is the nine-hour rule. All entering students and transfer students must take the TASP Test prior to the end of the semester in which they accumulate nine or more college-level semester credit hours (THECB,1995, 42). Prior to Fall Semester 1993, rules allowed students to wait until they had completed 15 semester credit hours. Since this rule was changed, it appears that a less-prepared student population is being tested which lowers the passing rate statewide (THECB,1995).

Consequently, the TASP Test is a gatekeeper to educational attainment in Texas. If at-risk students are not identified or their needs not addressed, then generations of Texans cannot achieve economic and political independence. Instead, members of this population will be denied the opportunity to improve their quality of life.

Overview of Methodology and Limitations

University of Texas-Pan American student records of 150 entering freshmen from the 1995 Summer and Fall Semesters will be examined. A sample of equal fifths from McAllen Independent School District, PSJA Independent School

District, Mission Consolidated Independent School District, Edinburg Independent School District, and Sharyland Independent School District will be reviewed. Student TASP performance will be defined as TASP complete which means all three sections were passed or TASP affected which means at least one section was failed. The attempt will be made to correlate numerous variables of a student's background with TASP Test performance to examine if relationships exist.

Student achievement variables will include college grade point averages, ACT composite scores, college remediation results, admissions and probation status. Academic records will be obtained from the university's computer data system.

Socioeconomic variables will be collected from the 1990 Tiger/Census Tract and CD Street Index. From this source, median household income, median home value, and parental educational attainment of students can be gathered.

From Snapshots: School District Profiles, taxable value per pupil, percentage of TAAS passage, average years of teaching experience, percentage of teachers with less than 5 years of experience, and dropout rates of the five school districts will be analyzed to uncover relationships between variables of a student's school district and TASP Test performance.

Statistical tests such as chi-square and regression analysis will be implemented to develop results. The limitations of time and money only allow a small sample population

to be reviewed. Prudence is required to avoid overgeneralization of results; however, student data will be obtained from five school districts to promote variance. At best, these results can suggest that additional research in the identified areas is needed.

CHAPTER 2

LITERATURE REVIEW

Researchers have been interested in outcomes of individual students, classes of students, schools, school districts, states, nations, ethnic groups, age groups, gender groups, and other subsets of the population. Analysts agree that learning is influenced significantly by factors outside the school. A vast array of home and background variables have been part of the inputs of schooling (Monk, 1992; Fetler, 1994).

The Condition of Education

The US Department of Education has compiled statistics that demonstrate inequities for certain types of students. In 1994, 9 percent of all white students did not graduate from high school while 16 percent of all black students and 40 percent of Hispanic students did not graduate (DOE, 1995, 72). The high school persistence rate for students in the top 20 percent of all family incomes was 11 percent higher than the rate for students from the bottom 20 percent of all family incomes (DOE, 1995, 36). In 1994, 50 percent of high school graduates from low-income families went to college as compared to 79 percent of those from high-income

families (DOE,1995,42). The 1992 percentages of total enrollment in higher education revealed that 75 percent of students were white, 10 percent were black, and 7 percent were Hispanic (DOE,1995,138). The following table displays SAT mean scores by ethnicity.

Table 2-1: 1994 SAT Mean Scores of College-Level Seniors by Ethnicity

Subject	Whites	Blacks	Hispanics
Verbal	443	352	372
Math	495	388	427

Source: US Department of Education, The Condition of Education 1995, (Office of Educational Research & Improvement, 1995, 235).

The Department of Education also employs indicators to show that educational and employment opportunities can be restricted for select groups. For example, many minority students from poor backgrounds may be at a greater risk of failure by attending schools in central cities. One of three students in central cities are black; one out of two are Hispanic (DOE,1995,120). Public high schools with more than 40 percent of its students who are eligible for free or reduced price lunches have a higher absentee rate (10%) than those schools with lower percentages of eligible students. Absenteeism forgoes the opportunity to learn while attendance is a basis for good work habits (DOE,1995,130).

Frequent school changes cause a lack of continuity in lesson content, a disruption in social ties, and a feeling

of alienation for the mobile student. Statistics revealed that students from families with incomes under \$10,000 were more likely to change schools twice between grades 1-8 than students from families earning over \$20,000. When examining students between grades 8-12, white students changed less frequently than blacks and Hispanics. While 16 percent of black students and 13 percent of Hispanic students were mobile, only 8 percent of white students changed schools (DOE,1995,132).

Crime in schools reduces school effectiveness and inhibits student learning. Although black and white high school seniors are equally likely to report being victimized at school, blacks are more likely to have been threatened or injured with a weapon in 1993 (DOE,1995,134).

A computer skill is vital to compete for jobs, but white students were more likely than other students to use a computer. In 1993, 40 percent of black and Hispanic students in grades 1-6 did not use a computer compared to 80 percent of white students who did use one (DOE,1995,34).

Educational attainment affects employment opportunities; however, there are stark differences associated with ethnicity. The following tables illustrate employment rates, median annual earnings, and Aid to Families with Dependent Children participation based on education and ethnicity. All three tables demonstrate that blacks and Hispanics are not at the same levels as whites in these comparisons.

Table 2-2: Percentage of High School Graduates Not Enrolled in College and For High School Dropouts That Are Employed Based on Ethnicity (1993)

Groups	Whites	Blacks	Hispanics
High School Graduates	71%	42%	43%
High School Dropouts	52%	29%	29%

Source: US Department of Education, The Condition of Education 1995, (Office of Educational Research & Improvement, 1995, 88).

Table 2-3: Median Annual Earnings Based on Education & Ethnicity (1994)

Education	Whites	Blacks	Hispanics
9-11 Years	\$20,969	\$14,921	\$16,127
13-15 Years	\$27,541	\$22,970	\$23,211
16+ Years	\$37,778	\$28,217	\$31,134

Source: US Department of Education, The Condition of Education 1995, (Office of Educational Research & Improvement, 1995, 292).

Table 2-4: Percentage of 25-34 Year Olds Receiving Income From AFDC Based on Education & Ethnicity (1992)

Education	Whites	Blacks	Hispanics
9-11 Years	11.0%	36.0%	15.0%
12 Years	4.0%	13.0%	7.0%
13-15 Years	3.0%	8.0%	4.0%
16+ Years	.4%	1.5%	.6%

Source: US Department of Education, The Condition of Education 1995, (Office of Educational Research & Improvement, 1995, 96).

Furthermore, white 16-24 year old, full-time college students are more likely to be employed than their black counterparts. The breakdown is 50 percent of white students in this category compared to 29 percent of black students (DOE,1995,142).

Studies of Ethnicity Factors

In a study of elementary classroom observations in several southern California school districts, resources were allocated differently. For example, if the class happens to be deficient in supplies such as textbooks or desks, the child who will not get a textbook or desk will likely be Hispanic (Ortiz,1988;Weis,1988,78).

One way in which Hispanic children are singled out is by having the teacher forget their names or be unable to pronounce them. Students may be totally forgotten when children are being selected for teams or groups or certain activities. If called upon, teachers do not wait as long for Hispanic children's responses as they do for others (Ortiz,1988;Weis,1988,79).

Two major ways are used to differentiate Hispanic from non-Hispanic in activity lessons. Hispanic children are likely to be frequent candidates for tasks that require leaving the classroom during activity lessons. The second way is the selection of activities available for them. Verbal activities are rarely assigned and activities involving abstractions and calculations are reluctantly granted (Ortiz, 1988;Weis,1988,80).

Standardized and competency tests are perceived as critical elements in suburban schools; however, Hispanic children are perceived as being unable to perform adequately on tests. If teachers believe their classroom's rating will be jeopardized by the low scores received by Hispanic children, they may not administer tests to them or discount the Hispanic children's performance (Ortiz,1988;Weis,1988,81).

Disparities for minorities and the poor are exacerbated in science and mathematics attainments. Trends show that achievement and interest in mathematics and science in elementary school affect ability-group placement in junior-high. Students showing high levels of ability are placed in classes that prepare for high school course content such as pre-algebra, algebra, and geometry. Students showing low achievement are assigned to remedial math and science classes. In high school, high-achieving students enroll in college-preparatory programs that require more math and science courses while lower-achieving students enroll in vocational or general programs that require fewer math and science courses. The number and level of math and science courses exert the strongest influence on preparation for college (Oakes,1988;Weis,1988,111).

Poor and minority students are more likely to be placed in the low-ability and remedial classes. Whites and upper-SES elementary students are more likely to be identified as able learners and placed in accelerated programs. As a result, by age nine, minority students score substantially

lower than whites in both mathematics and science. Consequently, blacks, Hispanics, and poor students are placed in non-academic curriculum tracks in junior-high and high schools (Oakes,1988;Weis,1988,113).

Lam and Gordon claimed in their study of 50 state departments of education that 5 million students were tested unfairly because achievement tests were administered based on student age and grade levels without considering linguistic and cultural backgrounds of limited-English proficient students. As a result, severe barriers to realizing educational, social, and economic opportunities are imposed because bias in state achievement test occurs due to inadequate policies and guidelines governing LEP students. Their questionnaire revealed that 62 percent of states do not have guidelines to modify tests or make special provisions (Lam & Gordon,1992,19).

Studies of Socioeconomic Factors

Wright and Michael studied 172 high schools in Los Angeles County and found that two groups made average scores on English and mathematics achievement tests. These groups were limited-English proficient students and students from families receiving AFDC payments (Wright & Michael,1989,940).

Herman and Golan compared classrooms with high SES students and classrooms with low SES students. They concluded that the percentage of SES students in a class is significant and negatively related to school attention to test scores, teacher attention to testing in planning instruction, and

overall time devoted to test-preparation activities. Teachers serving more disadvantaged students reported less school improvement, planning less efforts to improve student attitudes, and less attention to science, art, and thinking skills in curriculum (Herman & Golan,1993,21).

McDonald and McPherson conducted a study of 152 students in an economics class at the University of Chicago Circle to identify high school type, gender, and SES factors as predictors of achievement. They concluded that students who graduated from suburban parochial schools and suburban public schools tended to make higher college grade point averages. Parental income and education were found to be statistically insignificant (McDonald & McPherson,1975,933).

Baird studied graduate and professional school grades with students' background variables and determined that parental level of education was a significant predictor of grades in the arts and humanities while family income predicted academic achievement in law (Baird,1975,945).

Barger and Hall observed data of University of Florida freshmen and sophomores to determine if SES variables were related to dropout rates and grade achievement. They stated that dropout rates were linked to male and female students from dysfunctional families. For entering freshmen, high parental educational attainment, large family size, and older family ordinal position were positively related to high grade achievement (Barger & Hall,1965,508).

Studies of Institutional Factors

Money is an ingredient necessary for policy outcomes. Berliner dismissed the claim that the amount of money does not affect productivity of schools. By comparing seven states spending the least on education with seven states spending the most on education, the highest spending states had a higher percentage of seniors taking the SAT Test (Copulsky & Ducoffe, 1992; Berliner, 1993).

Table 2-5: Comparison of High & Low State Spending Controlled For Percentage of Seniors Taking SAT Test (1990)

States	Average Expenditure Per Pupil	Percentage of Seniors Taking SAT
7 Lowest	\$3272	6%
7 Highest	\$7252	69%

Source: (Copulsky & Ducoffe, 1992; Berliner, 1993).

When investigating the quality of schools, Card and Krueger concluded that teachers' salaries, class size, and length of the school year affected future income of students. Manski uncovered evidence that higher salaries attract teachers with higher academic ability. Murnane and Olsen reported that teachers' salaries are related to the number of years of experience that a teacher obtains (Berliner, 1993).

A persuasive study of teacher data on student performance was presented in R.F. Ferguson's article, "Paying for Public Education: New Evidence on How and Why Money Matters." Over a five year period, Ferguson examined teachers

and students from 900 Texas school districts; he discovered that a teacher's high academic proficiency and many years of experience are related to a student's high SAT Test score. Moreover, teachers with masters degrees and teachers with smaller class sizes were associated with a student's high achievement in school (Ferguson,1991;Berliner,1993).

Berliner reported that teachers' salaries and class size have an effect on student achievement. These statistics are classified as instructional purposes on reports that display per-pupil expenditures (Berliner,1993).

Related Studies

Marjoribanks conducted a study that examined the nature of relations between the family learning environment and measures of children's characteristics. Family literacy, parental aspirations of the child, and parental interest in the child's education were used to construct terms of family environment ranging from restrictive to enriched. A child's self-esteem, occupational aspirations, and English and math achievement were compared with the type of family environment. Results indicated that changes in family environment from restricted to enriched were associated with an increase in a child's performance score (Marjoribanks, 1975,67).

Chissom and Lanier examined the effect of high school grade point averages (GPAS) and SAT scores on freshmen college GPAS from Georgia Southern College. Their multiple regression model found GPA and SAT figures to be positively related

to college GPAS (Chissom & Lanier, 1975, 462).

Climaco developed a model of performance indicators for teachers to measure and evaluate school quality in Portugal. He included context indicators such as level of poverty, parental education, and socioeconomic status. He constructed human resource indicators such as teaching experience and qualifications, and financial indicators such as average expenditures per pupil and distribution of funding. Most schools used the model, but some teachers dismissed the importance of family background of students (Climaco, 1992, 302).

Texas Studies

The Mexican-American Task Force on Higher Education (MATFHE) issued a report to the Select Committee on Higher Education in 1986 calling for the needs of Mexican-Americans in higher education to be addressed.

The educational status of Mexican-Americans reveals that, in general, they are not able to compete for occupations which pay good incomes. Hence, they are not able to obtain decent housing, good health care or generally to provide for their families in an adequate fashion. The low educational status of Mexican-Americans also means that the community is plagued with high rates of alcohol and drug abuse, and crime. Further, the lack of opportunity which most Mexican-Americans pass to their children only ensures more of the same (MATFHE, 1986, 12).

The study documented disparities in Texas institutions of higher learning between Mexican-Americans and Anglo populations. In 1980, 20 percent of the Texas total population was Mexican-American; however, Mexican-American students composed 12.4 percent of the total enrollment in institutions

of higher education in Texas (MATFHE,1986,17).

As Mexican-Americans progress through higher education, their participation declines as Table 2-6 demonstrates.

Table 2-6: Percentage of Enrollment in Higher Education Based on Ethnicity (1983)

Ethnicity	Public Senior Universities	Public Junior Colleges	Medical/ Dental Schools	Health Related Schools
Anglo Students	74%	70%	84%	81%
Mexican- American Students	11%	17%	9%	7%

Source: Findings and Recommendations of the Mexican-American Task Force on Higher Education to the Select Committee on Higher Education, (MATFHE,1986,18).

Moreover, Hispanic faculty at the senior college level made up 3 percent of the total faculty compared to 86 percent for Anglos. At the public junior college level, Hispanics accounted for 7 percent of the total faculty while the Anglo faculty was 87 percent. Since 20 percent of the total population was Mexican-American, this displays an underrepresentation (MATFHE,1986,23).

These findings are significant because Kenneth J. Meier and Joseph Stewart,Jr. report that:

An Hispanic teacher serves as a role model for Hispanic students. Hispanic students are exposed to other Hispanics who have been successful. A role model permits an Hispanic student to aspire to middle-class status yet retain an identity with other Hispanics, something that

(Alvin) So finds is important in contributing to high scholastic achievement among lower socioeconomic status Hispanics (So,1987,19;Meier & Stewart,1991,28).

With regard to tenured faculty at public senior universities, Hispanics comprised 2 percent of the total in 1983; 90 percent were Anglos (MATFHE,1986,24).

There is evidence that extraordinary schools and teachers make a difference in how students perform (DOE,1995, v). However, it takes financial resources to develop these conditions. Since this is a study of student achievement in South Texas with a predominantly Mexican-American population, it is important to examine how the South Texas region has been severely disadvantaged.

In 1984-1985, the South Texas region was tied for last place in higher education appropriations per resident. The state average then was \$156 per person, but the region received only \$69.58 per person (MATFHE,1986,32). In addition, the South Texas region had the highest unemployment rate (12.3%) which was more than twice the 1984 average unemployment rate (5.9%) for Texas (MATFHE,1986,31). The South Texas region had the lowest average per capita income in the state. The average statewide per capita income was 47 percent greater than that of South Texas (MATFHE,1986,30).

The study made projections for the year 2000 of two predominantly Mexican-American cities and ten predominantly Anglo cities. Table 2-7 demonstrates that appropriations were at higher levels for predominantly Anglo cities.

Table 2-7: Higher Education Appropriations Per Capita by Area

Area	FY1985	FY2001
Predominantly Mexican-American	\$150.13	\$176.14
Predominantly Anglo	\$332.59	\$394.22
State Average	\$155.95	\$177.79

Source: Findings and Recommendations of the Mexican-American Task Force on Higher Education to the Select Committee on Higher Education, (MATFHE, 1986, 38).

The public post-secondary institutions in the ten predominantly Anglo cities received 2.2 times the state funding per capita of those in the predominantly Mexican-American cities (MATFHE, 1986, 38).

The number by level of available degree programs was an indication of racial disparity. The ten predominantly Anglo cities were above the state average at all levels.

Table 2-8: Degree Programs By Area Per 100,000 Residents (1984)

Area	Bachelors	Masters	Doctoral	Professional
PMA	9.51	8.05	0.52	0.15
PA	15.17	12.91	6.15	0.25
State Average	12.85	10.08	4.17	0.09

Source: Findings and Recommendations of the Mexican-American Task Force on Higher Education to the Select Committee on Higher Education, (MATFHE, 1986, 39).

The study concluded that standardized testing is a

pattern of exclusion from and denial of participation in educational opportunities. Commissioner of Higher Education Kenneth Ashworth stated:

One of the reasons for University of Texas at Austin's success in increasing minority enrollments is the institution's decreased reliance on standardized test scores (for admissions) which are known to discriminate against minorities (MATFHE, 1986, 50).

According to MATFHE, the most serious misuse of tests in Texas is the reliance on a test score as the sole criterion for offering an educational opportunity. In Texas, the State Legislature requires that college students entering teacher training programs, an academic field in which Mexican-Americans are relatively overrepresented, pass an achievement test (MATFHE, 1986, 51).

A study of 900 school districts in Texas demonstrated that there were strong and positive relationships between student reading scores and teacher scores on the TECAT Test. Student outcomes improved when the number of students per teacher was reduced to 18:1. Also, teachers with 9 or more years of experience produced better results on a student's test score (Kagal-Thrasher, 1993, 31).

The Lyndon B. Johnson School of Public Affairs produced a policy research project using statewide regression analysis to explain the variations in the enrollment of Texas residents in higher education institutions across the state to provide a basis for predicting changes in county enrollments. Two dependent variables were considered in the regression analysis. The first was the number of Texas residents attending

an institution of higher education in Texas in the Fall of 1970 by county of student residence. The second dependent variable was the county participation rate in Texas higher education relative to the county's total college age population. Only "per capita income of county residents" and "median education of males in the county" were significantly and positively correlated with both dependent variables while the "percentage of county population with an annual income below the poverty level" variable was significantly negatively correlated with both dependent variables (LBJ, 1975,12).

The 1983 Texas Assessment of Basic Skills results were analyzed by the Texas Education Agency. Ethnic performance showed that white students scored consistently higher than that of black and Hispanic students. Students identified as being from low-income families performed at a lower level than those from high-income families. Students with limited-English proficiency showed test percentages lower than those of students not so identified (TEA,1983,62).

The 1987 student performance results of the Texas Educational Assessment of Minimum Skills Test (TEAMS) were also investigated. This test evaluated an individual student's basic competency in mathematics, reading, and writing at grades 9,7,5,3, and 1 (TEA,1987,1). As a group, white students achieved a higher score on each subject area in all grade levels. Hispanic students performed better than black students on each test at these grade levels except

on the Grade 5 reading and writing test and the Grade 3 reading test (TEA,1987,3).

Students identified as low-income by participation in a free or reduced-price meal program and students enrolled in a program for the educationally disadvantaged achieved lower scores than students not participating in these programs (TEA,1987,4).

TASP Studies

The Texas Higher Education Coordinating Board produces the Annual Report on Academic Advising. The TASP program consists of three elements: diagnostics, advising, and remediation. Texas law mandates that, "Each institution shall establish advising programs to advise students at every level of course and degree options that are appropriate for the individual student" (TEC,1995,Sec.51.306(I)).

Ninety percent of Texas institutions of higher education were surveyed. Results indicated that not all students, including entering freshmen, receive academic advising. Advisors at 85 percent of universities and 91 percent of community and technical colleges meet with all entering freshmen at least once (THECB,1995).

Another THECB report, The Annual Report on the TASP and the Effectiveness of Remediation, collected performance measures for students in a Texas public college or university. A comparison of students who complete remediation with those who do not require remediation was performed. Data revealed that students who complete remediation

generally pass the first college-level English course at rates within 19 percentage points of students not requiring remediation. Students who complete remediation pass the first college-level mathematics course within 20 points of students not requiring remediation. Moreover, students who complete remediation generally receive a grade point average of 2.0 or higher at rates within 10 percentage points of students not requiring remediation (THECB,1995).

Debate on the Use of Achievement Tests

There is extensive commentary on the necessity of achievement tests. One critic challenged the claim that achievement tests do not measure real-world problem solving. Stedman claimed that reading tests use poetry, newspaper articles, and passages from real literature. Math tests use calculators and graphs and literacy tests use real-world tasks with real-world materials. In addition, general knowledge that can be measured by multiple-choice testing is an important educational goal (Stedman,1996).

Sanders and Horn examined a debate between the use of achievement tests versus alternative measures as a suitable model to evaluate educational outcomes. Standardized tests are subjected to validation criteria, reliability testing, and standardization procedures. Moreover, multiple-choice tests include an expansive range of questions which provides a more detailed picture of student learning (Sanders & Horn, 1995).

On the other hand, standardized tests measure only

recall and lower-order thinking skills; alternative methods require students to demonstrate higher-order skills such as critical thinking, analysis, synthesis, reasoning, and problem solving. However, the time spent in implementing Britain's alternative assessment system diverted time from instruction as much as five weeks (Kellay & Madaus, 1995; Sanders & Horn, 1995).

The cost of alternative assessment is expensive. George Madaus reported that writing performance assessment in American schools would cost \$3 billion annually (Wortham, 1993; Sanders & Horn, 1995). According to an American Association of School Administrators report on testing and assessment:

The cost-effectiveness of naturally standardized tests is a major boon to most local school districts. They can, in effect, get accountability for pennies a pupil. The alternatives are far more expensive... the cost differential can be as much as five times per pupil (Hynes, 1991; Sanders & Horn, 1995).

Performance Reports: An Alternative Model

Promoting school improvement can be accomplished with the information garnered from performance results. These reports motivated parents to lobby school boards and PTA groups to make changes. Newspaper comparisons spurred schools to compete for favorable standings (Fetler, 1994).

A performance report system develops a model that specifies inputs such as fiscal, staffing and students; processes such as curriculum, instruction, and services; and desired results such as student achievement, college

attendance, and employment (Fetler,1994). School performance can be predicted by statistical regression using background variables like parental education and economic status (Salganik,1994;Fetler,1994).

To illustrate, the California Department of Education implemented a school performance report. Data on academic course enrollments, attendance, dropouts, state achievement test results, SAT and ACT test scores were incorporated to produce this report. Performance data provided from these reports were useful in obtaining educational funding and passage of legislation favoring schools (Fetler,1994).

In addition, school accountability report cards were used in California. When minimum funding levels were set for school districts, Proposition 98 allowed for excess revenues to be dispersed to schools for instructional improvements, including salaries, and accountability. Without these performance reports, it is possible that government would more narrowly prescribe the use of new funds. Information on school conditions included:

1. student achievement toward meeting reading, writing, arithmetic, and other academic goals;
2. estimated expenditures per student;
3. progress toward reducing class sizes; and
4. teacher and staff training programs
(Fetler,1994).

These studies have all made a contribution in the planning and development of this research.

CHAPTER 3

METHODOLOGY

This research attempts to show relationships between TASP performance and variables of a student's academic performance, socioeconomic status, and high school district. By discovering relationships between these variables, TASP performance may be predicted; however, the primary purpose is to identify at-risk students in the secondary education level. Early detection could prevent low TASP scores and promote academic achievement through new programs designed for these students.

Study and Hypotheses

University of Texas-Pan American student records of 150 freshmen from the 1995 Fall and Summer semesters are examined. The sample is composed of equal fifths of these students who graduated from Edinburg Independent School District, McAllen Independent School District, Mission Consolidated Independent School District, Pharr-San Juan-Alamo Independent School District, and Sharyland Independent School District. This sample is drawn randomly by starting at the top of an alpha list of entering freshmen with street addresses. For each district, ten students are selected from

the top of the list. Ten students are selected from the middle of the list and ten students are selected from the bottom of the list to complete a collection from the same district. The process is repeated four more times to gather 150 names from 5 school districts.

Three hypotheses have been developed to uncover these relationships:

1. TASP failure is likely for students who demonstrate low ACT scores and college GPAS, probation status, remediation failure, and provisional admissions.
2. Ethnicity and socioeconomic status are negatively related to TASP scores.
3. In general, students from school districts with high TAAS passing rates, low dropout rates, high teacher stability, and more wealth will tend to have higher TASP scores than students from school districts with low TAAS passing rates, high dropout rates, low teacher stability, and less wealth.

Definition of Variables

To examine bivariate relationships, a dichotomy of each variable is constructed. Raw numbers are used in the multivariate analysis when possible.

TASP performance is the dependent variable and is categorized as TASP PASS or TASP FAIL. The student's first set of TASP scores is accessed for this observation through the university's computer data system. TASP PASS is defined as passing all three sections of the test; scores of 230 and higher on the reading and mathematics sections and a score of 220 or higher on the writing section are the state's passing standards. TASP FAIL is defined as scoring below the state standard in any one section of the exam.

There are three categories of independent variables: student achievement, socioeconomic, and institutional. Student achievement variables include college grade point average (CGPA), ACT composite, college remediation status, admissions status, and academic standing. These records are obtained from computer files by entering the student's social security number and reviewing the student's first semester of attendance.

Student Achievement Variables

These variables consist of dichotomous sections. For example, students who have a 2.0 CGPA or higher at the completion of their first semester are classified as HIGH CGPA. Students who have below a 2.0 CGPA are categorized as LOW CGPA. Although the university defines 1.7 as the minimum CGPA needed to be in good standing, the 2.0 average is selected because this level has a universal application in general.

Students who earn an ACT composite of 20 and higher are regarded as HIGH ACT and students who score below a 20 composite are defined as LOW ACT. The composite score of 20 is a criterion because the university defines this score as a means for clear admissions.

When a student participates in college remediation, they attend courses or tutoring sessions that teach basic reading, mathematics, and writing skills. For this study, students who do not require remediation or who pass English 1310, English 1320, Math 1300, or Math 1334 during their

first semester are classified as PASS REMEDIATION. Students in the sample who do not pass any of these classes during their first semester are reported as FAIL REMEDIATION. This variable is incorporated because content in these remedial courses mirrors skills needed to pass the TASP Test.

The admissions status of a UTPA freshman is defined as REGULAR ADMISSIONS or PROVISIONAL ENROLLMENT due to the revised academic policy. An entering freshman who has either completed college preparatory classes in high school, scored a 20 ACT composite, or graduated in the top 50 percent of their senior class are designated as REGULAR ADMISSIONS. Otherwise, their counterparts are categorized as PROVISIONAL ENROLLMENT. This variable is employed because the university's admissions policy is a reflection of student high school achievement.

The academic status of students is determined by their college grade point average. If students fall below a 1.7 CGPA at the completion of their first semester, they are placed on probation. Therefore, these students are classified as ON PROBATION; otherwise, their counterparts are categorized as GOOD STANDING. Since academic status is a measure of educational attainment in college, this variable is utilized to show if a relationship exists between this and TASP performance.

Socioeconomic Variables

These variables are obtained by corresponding student city addresses with census tracts from the 1990 Tiger/Census

Tract and CD-ROM Street Index. From this, parental median household income, median home value, and educational attainment can be estimated. Student ethnicity is determined by reviewing student data files from the computer.

Students who live in a census tract that has a median household income of \$30,000 or more are classified as HIGH INCOME; students who live in a census tract that has a median household income below \$30,000 are defined as LOW INCOME. This value level is chosen to show variation between census tracts.

Students who live in a census tract that have a median home value of \$50,000 or higher are identified as living in neighborhoods designated as HIGH VALUE. Their counterparts living in census tracts with a median home value below \$50,000 are identified as living in neighborhoods called LOW VALUE. This value level is chosen to show variation between census tracts.

Students who live in census tracts where predominant educational levels are categorized as "Below 9th Grade", "Some High School", or "High School" are regarded as LOW EDUCATION. Those students from census tracts classified as "Some College" or "Bachelor's" are defined as HIGH EDUCATION. Disparities in income levels are salient between those who have post-secondary hours and those who do not. Therefore, the attainment of college hours is the criterion used.

Student ethnicity will be distinguished as ANGLO or

MEXICAN-AMERICAN. Previous studies have illustrated that Anglo students, in general, tend to score higher on achievement tests than other ethnic groups.

These tables can be used to reference socioeconomic variables through a student's census tract.

Table 3-1: Summary of 1990 Census Tracts by Median Income

Tract	Median Income	Tract	Median Income
201	\$13,018	211	\$11,303
202	\$17,442	214.01	\$15,723
203	\$31,323	215	\$12,332
204.01	\$14,812	216	\$11,673
205.01	\$14,462	217	\$17,623
205.02	\$16,859	218.02	\$16,902
205.03	\$13,411	219	\$14,583
205.20	\$14,462	220.01	\$14,775
206	\$10,863	236	\$12,036
207.03	\$13,890	237	\$10,593
208.01	\$38,227	238	\$22,304
208.02	\$29,509	239.01	\$21,159
209.01	\$53,431	239.02	\$39,742
209.02	\$28,571	240	\$14,419
210	\$16,996		

Source: U.S. Census Bureau, 1990 Census Tract & CD-ROM Street Index.

Table 3-2: Summary of 1990 Census Tracts by Median Home Value

Tract	Median Home Value	Tract	Median Home Value
201	\$ 24,800	211	\$ 34,500
202	\$ 38,500	214.01	\$ 40,700
203	\$ 64,200	215	\$ 23,300
204.01	\$ 31,300	216	\$ 22,500
205.01	\$ 31,600	217	\$ 36,500
205.02	\$ 39,800	218.02	\$ 36,400
205.03	\$ 31,400	219	\$ 32,400
205.20	\$ 30,000	220.01	\$ 41,100
206	\$ 29,800	236	\$ 31,600
207.03	\$ 39,300	237	\$ 31,100
208.01	\$ 72,200	238	\$ 51,000
208.02	\$ 64,400	239.01	\$ 51,900
209.01	\$110,000	239.02	\$ 75,000
209.02	\$ 64,500	240	\$ 37,300
210	\$ 44,700		

Source: U.S. Census Bureau, 1990 Census Tract & CD-ROM Street Index.

Table 3-3: Summary of 1990 Census Tracts by Education Level

Tracts Above 12 Years of Education		Tracts With 12 Years or Below of Education			
203	220.01	201	205.03	211	218.02
208.01	238	202	205.20	214.01	219
208.02	239	204.01	206	215	236
209.01	239.02	205.01	207.03	216	237
209.02		205.02	210	217	240

Source: U.S. Census Bureau, 1990 Census Tract & CD-ROM Street Index.

Institutional Variables

These variables are constructed by retrieving data for the five selected Rio Grande Valley school districts from Snapshots:School District Profiles. From this, taxable value per pupil, percentage of TAAS pasage, average years of teaching experience, and dropout rates of each district is reviewed. Those variables are divided into dichotomous categories for chi-square tests. However, raw numbers are used for the regression equation.

School districts that have a taxable value per pupil of \$70,000 and higher are identified as HIGH TAX VALUE; districts with a taxable value below \$70,000 are designated as LOW TAX VALUE. This variable is chosen because it reflects a district's wealth.

School districts that have a 45 percent or higher TAAS passing rate from students are regarded as HIGH TAAS and districts which signalize below a 45 percent TAAS passing rate are considered LOW TAAS. This variable is selected because it demonstrates academic achievement of students in public schools.

School districts whose faculty averages 10 years or more teaching experience are defined as HIGH TEACHING EXPERIENCE while districts that display an average teaching experience statistic below 10 years are classified as LOW TEACHING EXPERIENCE. Moreover, school districts where more than 35 percent of their faculty have 5 or less years of total experience are classified as LOW TEACHING SERVICE. Their

counterparts are categorized as HIGH TEACHING SERVICE. These variables are employed because it illustrates levels of a district's teaching stability which is regarded as an important factor in academic achievement.

School districts that display a dropout rate of 6 percent and above are defined as HIGH DROPOUT and districts with dropout rates below 6 percent are defined as LOW DROPOUT. This variable is incorporated because high dropout rates may be a symptom of institutional problems conducive to low educational attainment.

This table can be reviewed to cross-reference a student's graduating high school district with institutional variables.

Table 3-4: Summary of School Districts by Institutional Factors

Category	EISD	MISD	MCISD	PSJAISD	SISD
Taxable Value Per Pupil	74K	109K	37K	44K	78K
TAAS Passing Rate	47%	49%	41%	35%	48%
Average Years of Teaching Experience	11	11	10	9	11
Percentage of Teachers With 5 or Less Years of Experience	33%	34%	37%	40%	31%
Dropout Rate	3%	7%	6%	5%	3%

Source: Texas Education Agency, Snapshots: School District Profiles, (TEA, 1994).

Chi-Square Testing

Through the implementation of the Statistical Package for Social Sciences (SPSS) software, the chi-square statistical test is used to determine if a relationship exists between an independent variable and TASP performance. A contingency table is formulated and the number of observations are placed in their designated category. The following table illustrates.

Table 3-5: Contingency Table Example of Parental Income

<u>TASP Performance</u>	<u>Low</u>	<u>High</u>
Fail	61%	30%
Pass	<u>39%</u> (n=94)	<u>70%</u> (n=56)

$x^2_{obs}=13.28 > x^2_{crit}=3.84$ Reject Null Cramer's V=.30

A null hypothesis is developed which says there is no relationship between the row and column variables in the survey. An alternative hypothesis is constructed which states that the row and column variables are related in the population. With a confidence level of .05 and a one degree of freedom chosen, a chi-square critical value of 3.84 is determined. The chi-square formula is used to measure the difference of obtained frequencies from expected frequencies in each table's cell:

$$x^2_{obs} = \frac{(O-E)^2}{E} + \frac{(O-E)^2}{E} + \frac{(O-E)^2}{E} + \frac{(O-E)^2}{E} .$$

If the value of x^2_{obs} is equal to or greater than 3.84, it falls into the rejection region of the null hypothesis and

acceptance of the alternative hypothesis. In other words, if there is no relation among the variables, the amount of obtained frequencies should resemble the amount of expected frequencies in each cell. If the variables of one table are related, then the amount of obtained frequencies should differ from the expected frequencies by larger amounts (Kiess, 1989, 457).

Regression Equations

In the SPSS program, a regression equation will be calculated to identify which variables are significant in predicting TASP performance. Since the relationship between two or more variables can be summarized by the line:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + \dots\dots\dots,$$

the unstandardized regression coefficient of each independent variable demonstrates the strength and direction of that variable. Direction is indicated as positive or negative. For example, a positive relationship reveals that as the amount of the independent variable increases, the amount of the dependent variable also increases. Multiple regression incorporates the use of more than one independent variable in a regression equation (Meier & Brudney, 1993, 291-300; O'Sullivan & Rassel, 1989, 368).

There will be one regression equation used for this study. Instead of dichotomizing all variables, raw numbers will be used for most variables. However, the remediation, admissions, academic, and ethnicity variables will retain their dichotomies.

Table 3-6: Regression Equation Used In This Study

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + b_9x_9 + b_{10}x_{10} + b_{11}x_{11} + b_{12}x_{12} + b_{13}x_{13} + b_{14}x_{14}$$

Where:

Y	=	PREDICTED TASP PERFORMANCE
a	=	Y-INTERCEPT
b	=	REGRESSION COEFFICIENT
x ₁	=	STUDENT COLLEGE GRADE POINT AVERAGE
x ₂	=	STUDENT ACT COMPOSITE
x ₃	=	STUDENT REMEDIATION PERFORMANCE
x ₄	=	STUDENT ADMISSIONS STATUS
x ₅	=	STUDENT ACADEMIC STATUS
x ₆	=	PARENTAL INCOME
x ₇	=	PARENTAL HOME VALUE
x ₈	=	PARENTAL EDUCATION LEVEL
x ₉	=	STUDENT ETHNICITY
x ₁₀	=	DISTRICT TAXABLE VALUE PER PUPIL
x ₁₁	=	DISTRICT TAAS PASSING RATE
x ₁₂	=	DISTRICT TEACHING EXPERIENCE
x ₁₃	=	DISTRICT TEACHING SERVICE
x ₁₄	=	DISTRICT DROPOUT RATE

Data Collection and Variable Coding

An initial group of 150 worksheets are constructed to reflect each student's background. From these worksheets, a 19 digit code representing each student is developed and entered into the SPSS program for chi-square tests. For multiple regression analysis, the data file is recoded to a 29 digit code. The data used in this study are kept confidential. No disclosure of social security numbers and street addresses will be made. The sample is randomly chosen from an entering freshmen alpha list. In Chapter Four, the data will be examined and presented in tables. Chapter Five will offer recommendations based on these results.

CHAPTER 4

RESULTS

The contingency tables are the first step in investigating relationships between TASP Test performance and independent variables.¹ To interpret these tables, the χ^2 observed value of a table is examined. If this value is higher than the χ^2 critical value of 3.84, then it is determined that there is a significant relationship between the independent and dependent variables. Furthermore, the Cramer's V measure of association is reviewed to identify the strength of the relationship between TASP performance and an independent variable.

Academic Variables

From the student academic category, all five variables show a statistically significant relationship with TASP scores. A student's ACT composite score, remediation status, and academic performance reveal the strongest associations with a student's TASP scores.

Students who have a 2.0 GPA or higher tend to pass

¹Of course, recognizing the classic ecological fallacy argument (see Robinson, 1950), one must be careful in combining aggregate and individual analyses.

the TASP Test. In Table 4-1, 61 percent of these students pass TASP; however, 68 percent of students with a low GPA show a tendency to fail the TASP. The Cramer's V measure indicates a moderate degree of association with TASP performance.

Table 4-1: TASP Performance	Student College Grade Point Average	
	<u>Low</u>	<u>High</u>
Fail	68%	39%
Pass	<u>32%</u> (n=56)	<u>61%</u> (n=94)

$x^2_{obs} = 11.77 > x^2_{crit} = 3.84$ Reject Null Cramer's V = .28

In Table 4-2, a strong association between a student's ACT composite score and TASP score is prevalent. 86 percent of students with a 20 or higher composite score pass the TASP Test. Only 33 percent of the surveyed students who have below a 20 ACT composite score pass the TASP.

Table 4-2: TASP Performance	Student ACT Composite Score	
	<u>Low</u>	<u>High</u>
Fail	67%	14%
Pass	<u>33%</u> (n=100)	<u>86%</u> (n=50)

$x^2_{obs} = 35.57 > x^2_{crit} = 3.84$ Reject Null Cramer's V = .49

The striking figure from Table 4-3 is that 97 percent of surveyed students who failed remediation in reading, writing, or mathematics are more likely to fail the TASP Test. Those who do not fail or require remediation are

likely to pass the exam. The Cramer's V measure of .47 reveals a strong relationship between remediation status and TASP performance.

TASP Performance	Student Remediation Status	
	<u>Fail</u>	<u>Pass</u>
Fail	97%	38%
Pass	<u>3%</u> (n=30)	<u>62%</u> (n=120)

$x^2_{obs}=33.07 > x^2_{crit}=3.84$ Reject Null Cramer's V= .47

Students who are categorized as provisionally enrolled are at a higher risk to fail the TASP Test than their counterparts. From Table 4-4, 85 percent of PEP students fail the TASP Test; 57 percent of regular admissions students pass the TASP. There is a moderate degree of association between student admissions status and TASP performance.

TASP Performance	Student Admissions Status	
	<u>Provisional</u>	<u>Regular</u>
Fail	85%	43%
Pass	<u>15%</u> (n=21)	<u>57%</u> (n=129)

$x^2_{obs}=13.87 > x^2_{crit}=3.84$ Reject Null Cramer's V= .30

A moderate significant relationship is evident between a student's academic status and TASP score in Table 4-5. A majority of students on academic probation are likely to

fail the TASP Test. Moreover, a majority of students in good academic standing are likely to pass TASP.

Table 4-5: TASP Performance	Student Academic Status	
	<u>Probation</u>	<u>Good Standing</u>
Fail	76%	40%
Pass	<u>24%</u> (n=45)	<u>60%</u> (n=105)
x ² obs=17.18 > x ² crit=3.84 Reject Null Cramer's V= .34		

Socioeconomic Variables

All of the socioeconomic variables display significant relationships to student TASP performance. By examining the Cramer's V measures, all of the socioeconomic factors exhibit moderate positive relationships to TASP scores.

Table 4-6:	Student Ethnicity	
	<u>Mexican-American</u>	<u>Anglo</u>
Fail	55%	21%
Pass	<u>45%</u> (n=126)	<u>79%</u> (n=24)
x ² obs=10.55 > x ² crit=3.84 Reject Null Cramer's V= .26		

Fifty-five percent of Mexican-American students fail the TASP Test in this sample; however, nearly eighty percent of Anglo students pass the TASP. The table indicates a moderate strength of association between TASP performance and ethnicity.

Table 4-7:		Parental Income	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		61%	29%
Pass		<u>39%</u> (n=98)	<u>71%</u> (n=52)
$\chi^2_{obs}=13.75 > \chi^2_{crit}=3.84$ Reject Null Cramer's V= .30			

In Table 4-7, 71 percent of students from families whose average household income is \$30,000 or higher pass the exam, but 61 percent of students from families whose average household income is below \$30,000 fail the exam.

Table 4-8:		Parental Home Value	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		61%	30%
Pass		<u>39%</u> (n=94)	<u>70%</u> (n=56)
$\chi^2_{obs}=13.28 > \chi^2_{crit}=3.84$ Reject Null Cramer's V= .30			

These results illustrate that students from households valued above \$50,000 tend to pass the TASP Test. In this survey, 70 percent of these students pass the exam. However, 61 percent of students from households valued below \$50,000 fail the TASP Test.

Table 4-9 demonstrates a moderate association between parental education level and student TASP performance. A majority of students from families whose parents did not obtain a college degree show a tendency to fail TASP.

Table 4-9: TASP Performance	Parental Education Level	
	<u>Low</u>	<u>High</u>
Fail	58%	32%
Pass	<u>42%</u> (n=103)	<u>68%</u> (n=47)
x ² obs=8.60 > x ² crit=3.84 Reject Null Cramer's V= .24		

However, their counterparts demonstrate the likelihood of passing TASP. Sixty-eight percent of students whose parents received a college degree or higher pass the TASP Test. Forty-two percent of students whose parents did not receive a college degree pass the exam.

Institutional Variables

Only three institutional variables, district taxable value per pupil, district teaching experience, and district teaching service, exhibit a statistical significance with TASP performance. There is no statistical relationship between TASP scores and a school district's TAAS performance or dropout rate.

From Table 4-10, students who graduate from school districts that have a taxable value per pupil of \$70,000 or more are likely to pass the TASP Test. From this sample, 60 percent of these students pass the exam; however, 65 percent of students who graduated from school districts with lower taxable values per pupil fail the TASP Test. The Cramer's V measure displays a moderate association between the two variables.

Table 4-10:		District Taxable Value Per Pupil	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		65%	40%
Pass		<u>35%</u> (n=60)	<u>60%</u> (n=90)
x ² obs=9.36 > x ² crit=3.84 Reject Null Cramer's V= .25			

There is no relationship between district TAAS passing rate and TASP performance according to Table 4-11.

Table 4-11:		District TAAS Passing Rate	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		58%	45%
Pass		<u>42%</u> (n=60)	<u>55%</u> (n=90)
x ² obs=2.43 < x ² crit=3.84 Accept Null Cramer's V= .13			

A weak relationship is evident between student TASP performance and a district's average years of teaching experience. Students who graduate from a school district whose faculty averages 10 or more years teaching experience tend to pass the TASP Test. In Table 4-12, 55 percent of these students who graduate from these districts pass the exam. However, students from school districts whose faculty averages below 10 years of teaching experience showed a tendency to fail the TASP Test. In this table, 66 percent of students from these districts fail the exam.

Table 4-12:		District Teaching Experience	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		66%	45%
Pass		<u>34%</u> (n=30)	<u>55%</u> (n=120)
$x^2_{obs}=4.17 > x^2_{crit}=3.84$ Reject Null Cramer's V= .17			

Of the sixty students who graduate from districts where more than one-third of their faculty have five or less years of experience, 35 percent of these students pass the TASP. Only sixty percent of their counterparts fail the exam.

Table 4-13:		District Teaching Service	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		65%	40%
Pass		<u>35%</u> (n=60)	<u>60%</u> (n=90)
$x^2_{obs}=9.00 > x^2_{crit}=3.84$ Reject Null Cramer's V= .25			

Table 4-14 indicates that no statistical relationship between a student's TASP scores and the dropout rate of the school district where the student graduated from exists.

Table 4-14:		District Dropout Rate	
TASP Performance		<u>Low</u>	<u>High</u>
Fail		51%	50%
Pass		<u>49%</u> (n=90)	<u>50%</u> (n=60)
$x^2_{obs}=0.10 < x^2_{crit}=3.84$ Accept Null			

Multiple Regression Results

Although contingency tables and chi-square tests are useful in identifying relationships between a dependent and independent variable, it is multiple regression procedures that allow several independent variables in one equation.² The multiple regression equation gives the effect of each independent variable while controlling for other variables in the equation (O'Sullivan, 1989, 367).

Table 4-15: Regression Variables in Predicting TASP Scores

Dependent Variable= Student TASP Performance		
Independent Variables	Full Model (s.e.)	Reduced Model (s.e.)
College Grade Point Average	.20 (.220)	a
ACT Composite	*2.97 (.513)	*3.39 (.460)
Remediation Status	*17.26 (3.98)	*19.22 (3.91)
Academic Status	3.48 (4.86)	a
Admissions Status	*9.65 (4.33)	*10.93 (4.27)
Student Ethnicity	1.55 (4.17)	a
Parental Income	.15 (.178)	a
Constant (y-intercept)	145.92	145.90
Adjusted R ²	.54	.54
F	**25.51	**56.87
n (# of cases)	150.00	150.00

p < .05*

p < .001**

a = equation estimated omitting this variable

According to the adjusted R² statistic, the regression equation explains 54 percent of the variation in TASP scores.

²The Parental Home Value variable and institutional variables were removed from the equation due to collinearity.

Other factors not in the equation account for 46 percent of the variation in TASP performance. To interpret this equation from the full model, a student with a 20 ACT composite score who is not in the provisional enrollment program nor requires remediation is considered for prediction of TASP performance. If this student is Anglo and resides in census tract 209.01, we can use the reduced model's equation to calculate the predicted TASP score.³

$243.85 = 145.90 + 3.39(20 \text{ ACT}) + 19.22(1 \text{ REMED}) + 10.93(1 \text{ ADMS})$. This regression equation is significant at the alpha level of .000.

Summary of Results

The contingency tables tend to support the original hypotheses that academic, socioeconomic, and institutional variables have a relationship with TASP performance. Chi-square testing is a first step in identifying relationships for closer study. However, multiple regression techniques indicate that only academic variables are significant in predicting TASP scores. It was surprising that no other variables made a significant contribution to the regression equation. Yet, this is not to totally disregard the results of chi-square testing. Instead, these results open an inquiry for additional studies that can overcome the constraints of time and money which plagued this study. For

³The codes for each variable are listed in the appendix regarding computer commands.

example, a more extensive model could show that ACT scores or remediation status could be explained by parental income or a school district's dropout rate. Moreover, other variables such as ethnic composition of faculty or AFDC participation of a student's family may be factors that predict TASP scores. Chapter Five will tie in this paper's findings to policy implications and alternatives that are under consideration.

CHAPTER 5

DISCUSSION

The results from Chapter Four indicate that particular categories of students can be identified as at-risk for failing the TASP Test.

In general, students with low ACT scores and college grade point averages who are categorized in the provisional enrollment program and who require remediation demonstrate a higher risk of TASP failure. Moreover, chi-square tests reveal that minority students from low-income families who graduate from school districts with low tax bases are at-risk of failing the TASP Test. Multivariate tests fail to confirm this. Therefore, while the bivariate relationships might suggest these tendencies tend to jeopardize educational attainment of a college degree, more research is needed.

Additional studies may establish stronger relationships between socioeconomic or institutional variables with academic measures.

Academic Factors

The ACT exam appears to be a strong predictor of TASP performance. This instrument is used to identify

the need for remediation at the University of Texas-Pan American when TASP scores are not present. In addition, the mathematics department of the university only reviews the ACT math score as a means of math course placement.

This year, 55,442 Texas seniors took the ACT exam. The national composite score is 20.9, but Texas students score a 20.2 average composite. Disparities among ethnic groups surface. White students score a 21.5; however, the composite score of Mexican-American students is 18.1. Black students make a 17.2 ACT composite average score (Monitor, 1996,8D).

These statistics should encourage investigation of socioeconomic and institutional factors for possible causes for ACT score disparities.

One possible option is to eliminate the TASP Test instrument and use the ACT or TAAS exam as a substitute. The elimination of administration, monitoring, and evaluation could result in substantial reductions of expenditures. Given the self-preservation nature of bureaucracies, this seems to be an implausible task; however, the Texas Legislature had sent a survey team this summer on a fact-finding tour of several universities. Their purpose was to investigate the necessity of the TASP Test. Their results have not been reported.

I believe the TASP Test should remain intact. The TAAS exam only gauges high school level skills. The ACT exam measures skills above college basic skills. Moreover,

the ACT exam does not require the construction of essays. The TASP Test is necessary to identify the level of college basic skills (Alpert, Gorth, & Allan, 1989, 127).

One policy proposal is to restrict the use of student achievement testing of individual students. Instead, randomly selected students may be tested on randomly selected items. The obtained data can be used for group evaluation without the need for individual student data. This can be less expensive and time-consuming which releases more time and resources for direct instruction (Barona & Garcia, 1990, 348). I disagree with this approach because this can create a lack in identifying students who need remediation if they fall through the cracks. Individual identification is needed.

A recommendation by the Texas Senate Committee has proposed that college students pass a rigorous test before taking upper-division courses. According to Senate Education Committee Chairman Bill Ratliff,:

We would for the first time be able to assess and hold colleges accountable for whether or not they are passing students at the freshmen and sophomore level who are not capable of passing a 'rising junior' test (Monitor, 1996, 5D).

He said that the TASP could be eliminated if the rising junior test were implemented and if TAAS measures if high school students are prepared for college (Monitor, 1996, 5D). The only weakness in this proposal is that college basic skills deficiencies are not identified until the junior level. The TAAS exam only assesses high school level skills.

A curriculum rewrite is expected to be adopted by

the State Board of Education in 1997 in response to the growing number of students who require remediation at the college level. Perhaps this reform can change the scope of the TAAS exam and pave the way for a rising junior test. Geoffrey Fletcher, associate commissioner for curriculum and assessment at the Texas Education Agency, states:

the key difference from current subject requirements is a subtle but important shift in focus; rather than specifying what educators should teach, it will detail what skills students should have. The language you will see should focus on what students should know, as opposed to what the teacher will do to the student (Fikac, 1996, 8A).

The Provisional Enrollment Program (PEP) is a transitional plan towards stricter admissions requirements. This phase will continue to exist until the year 2004. The stigmatization of the label "PEP student" may contribute to a lower level of TASP performance since this designation is made during the student's first semester of college. An "admissions granted" or "admissions denied" label is more appropriate.

Socioeconomic Factors

The findings of the chi-square tests in Chapter Four reinforce the need for further inquiry that socioeconomic factors bear an influence on academic achievement. Ray Grasshoff, assistant director for media relations at the Texas Higher Education Coordinating Board, said that 62 percent of Hispanic males and 68 percent of Hispanic women go beyond the freshman year. Family responsibilities,

financial difficulties, and poor academic background discourage students from continuing their education. According to Judy Vinson, vice president for student affairs for UTPA, 65 percent of UTPA students are first-generation college students who sort through the college experience first-hand without the guidance of family members who know the problems (Chavez & Hernandez,1996,1A).

Administrators from UTPA want to develop a freshman success course that would highlight time management, study skills, and university resources. The implementation of a "mini-college" course in high schools is being reviewed since there is a substantial burden on first-generation students and freshmen (Chavez & Hernandez,1996,1A). Microclasses that are comprised of eight students have been formed as part of curriculum in some schools. Their purpose is to provide a relaxed atmosphere for students to discuss academic and personal concerns in a group atmosphere and encourage parental involvement (Barona & Garcia,1990,131). Methods to recognize gifted students from diverse cultures include teacher nominations and identification matrixes that identify creativity, leadership, and motivational talents among diverse students (Barona & Garcia,1990,292). Concerns such as physical safety, family life, and employment are prominent from Mexican-American students (Barona & Garcia, 1990,115). Program development designed to reduce stressors confronting at-risk students should be endorsed.

Institutional Factors

Chi-square tests in Chapter Four demonstrate the need to examine further the impact of institutional factors on student achievement. Policies to increase a teacher's salary and incentive to stay on the job should be supported. The Monitor reports a survey that nearly 40 percent of Texas teachers are seriously considering quitting. Forty-four percent of those who want to quit cite stress, paperwork, and administrative hassles as reasons to quit while 25 percent cite inadequate pay (Monitor, 1994, 1A).

The Department of Education reports that the 1994 average salary for a teacher was \$36,495. However, the average salary for a teacher in Texas was \$30,925. Salary levels should be raised to keep qualified teachers and attract teaching candidates (DOE, 1995, 158).

A higher tax base allows a district to offer more competitive salaries and incentives. Chi-square testing in this research uncovered a relationship between TASP performance and district taxable wealth. This should encourage subsequent research into how school districts influence student achievement. This is the basis for a proposal that should be endorsed. Lt. Governor Bob Bullock proposes to spend \$527 million in unused lottery money on education, particularly a teacher pay raise. Bullock also favors freezing property taxes with windfall lottery funds paying for a teacher pay raise, new equipment or buildings. He observes that state aid to build facilities in fast-

growing districts like South Texas remains an unresolved issue. In addition, State Senator Eddie Lucio, Jr. plans to introduce legislation to impose a 5 percent tax on lottery winnings of \$250 or more. Lucio believes this could raise \$100 million that would be used only for school construction (Dailey, 1996, 1D).

Suggestions For Further Research

Intercorrelations among the independent variables used in this model could be constructed to uncover possible relationships. A comparison of TAAS, ACT, and TASP predictors could be designed to discover similar relationships between test performance and similar variables.

An intriguing study would compare all of the Rio Grande Valley school districts by examining a range of district variables with achievement performance. This could reveal which districts have the higher passing rates and which variables contribute to this success.

However, the most important prospect for research would be to analyze the effects of college remediation programs on achievement test scores. Does participation in tutorial labs, workshops, or remedial courses contribute to improved TASP scores? Which methods are more effective?

Significance of Study

This study serves to identify students at risk of failing the TASP Test. This information can distinguish groups that need assistance and forecast the target population

and resources required in remedial programs. The budgeting, personnel, and equipment needed to meet this demand must be sufficient to prepare students for the rigors of college. Moreover, this is essential to satisfy the goals of educational equality and accessibility outlined in the Texas Education Code.

These findings appear to call for a closer examination of secondary education and environmental factors external to the student's intelligence capability. Scarcity of meaningful rewards for those who cannot achieve competitively will discourage marginal students and exhaust strained resources for government agencies. By examining TASP performance, it is suggested that obstacles to educational equity remain in Texas.

BIBLIOGRAPHY

- Alpert, Richard T., William Phillip Gorth, and Richard G. Allan, Eds. Assessing Basic Academic Skills in Higher Education: The Texas Approach. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1989.
- Baird, Leonard L. "Comparative Prediction of First Year Graduate And Professional School Grades In Six Fields." Educational and Psychological Measurement 35 (1975): 941-946.
- Barger, Ben, and Everette Hall. "The Interaction Of Ability Levels And Socioeconomic Variables In The Prediction Of College Dropouts And Grade Achievement." Educational and Psychological Measurement 25 (1965): 501-508.
- Barona, Andres, and Eugene E. Garcia. Children At Risk: Poverty, Minority Status, and Other Issues In Educational Equity. Washington, D.C.: National Association of School Psychologists, 1990.
- Berliner, David C. "Educational Reform In An Era Of Disinformation." Education Policy Analysis Archives 1.2 (Feb. 2, 1991): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.
- Capulsky W., and R. Ducoffe. "Why Raising Educational Expenditures Can Lower SAT Scores." (1992): unpublished paper. Cited In David C. Berliner. "Educational Reform In An Era Of Disinformation." Education Policy Analysis Archives 1.2 (Feb. 2, 1991): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.
- Chavez, Lupe, and Macarena Hernandez. "College Try: Pressure On Freshmen Can Be Overwhelming." The Monitor (McAllen) June 2, 1996: 1A.

Chissom, Brad S., and Doris Lanier. "Prediction of Freshmen GPA Using SAT Scores and High School Grades." Educational and Psychological Measurement 35 (1975): 461-463.

Climaco, Carmo. "Getting To Know Schools Using Performance Indicators: Criteria, Indicators, and Processes." Educational Review 44 (1992): 295-308.

Dailey, Rickey. "Bullock: Pay Schools Lotto Loot." The Monitor (McAllen) June 19, 1996: 1D.

Ferguson, R.F. "Paying For Public Education: New Evidence On How And Why Money Matters." Harvard Journal On Education 28 (1991): 465-498. Cited In David C. Berliner. "Educational Reform In An Era Of Dis-information." Education Policy Analysis Archives 1.2 (Feb. 2, 1991): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Fetler, Mark E. "Carrot Or Stick? How Do School Performance Reports Work?" Education Policy Analysis Archives 2.13 (Oct. 7, 1994): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Fikac, Peggy. "Curriculum Rewrite First In More Than A Decade." The Monitor (McAllen) May 28, 1996: 8A.

Fikac, Peggy. "TSTA: 40 Percent of Texas Teachers Considering Quitting." The Monitor (McAllen) April 30, 1994: 1D.

Funk & Wagnalls New Encyclopedia Yearbook, 1996 Ed. S.v. "Education."

Herman, Joan L., and Shari Golan. "The Effects Of Standardized Testing On Teaching And Schools." Educational Measurements: Issues And Practice 12 (1993): 20-41.

Hymes D., A. Chafin, and P.Gonder. The Changing Face of Testing And Assessment: Problems and Solutions. Arlington, VA: American Association of School Administrators, 1991. Cited In William L. Sanders and Sandra P. Horn. "Educational Assessment Reassessed: The Usefulness Of Student Achievement As Indicators For The Assessment Of Educational Outcomes." Education Policy Analysis Archives 3.6 (Mar. 3, 1995):n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Kagal-Thrasher, Deborah M. "Educational Expenditures And School Achievement: When And How Money Can Make A Difference." Educational Researcher 22 (1993): 30-32.

Kellaghan, T. G. Madaus, and P. Airasian. The Effects Of Standardized Testing. Boston: Kluwer-Nijhoff, 1982. Cited In William L. Sanders and Sandra P. Horn. "Educational Assessment Reassured: The Usefulness Of Standardized And Alternative Measures Of Student Achievement As Indicators For The Assessment Of Educational Outcomes." Education Policy Analysis Archives 3.6 (Mar. 3, 1995): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Lam, Tony C.M., and Wayne I. Gordon. "State Policies For Standardizing Achievement Testing Of Limited English Proficient Students." Educational Measurements: Issues And Practice 11 (1992): 18-20.

"Legislative Panel Promoting Stricter Tests For College Students." The Monitor (McAllen) May 15, 1996: 5D.

Levin, Benjamin. "Students And Educational Productivity." Education Policy Analysis Archives 1.5 (May 4, 1993): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Lyndon B. Johnson School Of Public Affairs. Post-Secondary Education Planning In Texas: Techniques For Policy Analyses. Austin: University of Texas, 1975.

Marjoribanks, Kevin. "Environment As A Threshold Variable: A Further Analysis." Journal of Educational Research 69 (1975): 66-67.

- McDonald, John F., and Michael McPherson. "High School Type, Sex, And Socioeconomic Factors As Predictors Of The Academic Achievement Of University Students." Educational and Psychological Measurement 35 (1975): 923-933.
- Meier, Kenneth J., and Jeffrey L. Brudney. Applied Statistics For Public Administrators. Belmont, CA: Wadsworth, 1993.
- Meier, Kenneth J., and Joseph Stewart, Jr. The Politics of Hispanic Education. Albany, NY: State University of New York Press, 1991.
- Mexican-American Task Force On Higher Education. Findings And Recommendations Of The Mexican-American Task Force On Higher Education To The Select Committee On Higher Education. n.p., 1986.
- Monk, D. "Education Productivity Research: An Update And Assessment Of Its Role In Education Finance Reform." Educational Evaluation and Policy Analysis 14 (1992): 307-332. Cited In Benjamin Levin. "Students And Educational Productivity." Education Policy Analysis Archives 1.5 (May 4, 1993): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamoney.ed.asu.edu/epaa.
- National Evaluation Systems. TASP Faculty Manual. Amherst, MA: NES, 1994.
- Oakes, Jeannie. "Tracking In Mathematics And Science Education: A Structural Contribution To Unequal Schooling." In Class, Race, And Gender In American Education, Ed. Lois Weis, 106-125. Albany, NY: SUNY Press, 1988.
- Olivarez, Shirley. Telephone Interview. Feb. 13, 1996.
- Ortiz, Flora Ida. "Hispanic-American Children's Experiences In Classrooms: A Comparison Between Hispanic And Non-Hispanic Children." In Class, Race, And Gender In American Education, Ed. Lois Weis, 63-86. Albany, NY: SUNY Press, 1988.

O'Sullivan, Elizabethann, and Gary R. Rassel. Research Methods For Public Administrators. New York: Longman, 1989.

Robinson, William S. "Ecological Correlation and the Behavior of Individuals." American Sociological Review 15 (1950): 351-357. Cited in Thomas Longoria, Jr., Robert D. Wrinkle, and J.L. Polinard. "Mexican-American Voter Registration and Turnout: Another Look." Social Science Quarterly 71.2 (June 1990): 356-361.

Salganik, L. "Apples and Apples: Comparing Performance Indicators For Places With Similar Demographic Characteristics." Educational Evaluation and Policy Analysis 16 (1994): 125-141. Cited In Mark E. Fetler. "Carrot Or Stick? How Do School Performance Reports Work?" Education Policy Analysis Archives 2.13 (Oct. 7, 1994): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Sanders, William L., and Sandra P. Horn. "Educational Assessment Reassessed: The Usefulness Of Standardized And Alternative Measures Of Student Achievement As Indicators For The Assessment Of Educational Outcomes." Education Policy Analysis Archives 3.6 (Mar. 3, 1995): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

So, Alvin Y. "High Achieving Disadvantaged Students: A Study of Low SES Hispanic Language Minority Youth." Urban Education 22 (1989): 19-35. Cited In Kenneth J. Meier and Joseph Stewart, Jr. The Politics of Hispanic Education, 128 Albany, NY: State University of New York Press, 1991.

Stedman, Lawrence C. "The Achievement Crisis Is Real: A Review Of The Manufactured Crisis." Education Policy Analysis Archives 4.1 (Jan. 23, 1996): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Stone, J.E. "Inflated Grades, Inflated Enrollment, And Inflated Budgets: An Analysis And Call For Review At The State Level." Education Policy Analysis Archives 3.11 (June 26, 1995): n.pag. Online. Internet. Feb. 7, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

"TAAS Results Show Ethnic Disparities." The Monitor (McAllen) Apr. 25, 1996: 1A.

Texas Education Agency. Texas Assessment Of Academic Skills: Statewide Results Spring 1993-1995. (1995): n.pag. Online. Internet. Feb. 13, 1996. Available HTTP: www.tea.state.tx.us. or webtexas.edu.

Texas Education Agency. Texas Assessment Of Basic Skills: Statewide And Regional Results 1983. Austin: TEA Office of Publications, 1983.

Texas Education Agency. Texas Educational Assessment Of Minimum Skills: Student Performance Results 1987. Austin: TEA Office of Publications, 1987.

Texas Education Agency. 1992-1993 Snapshots: School District Profiles. Austin: TEA Office of Publications, 1993.

Texas Education Code. Sec. 4.001(A). (1995): n.pag. Online. Internet. Feb. 7, 1996. Available HTTP: www.webtexas.govt.

Texas Education Code. Sec. 51.306. (1995): n.pag. Online. Internet. Feb. 7, 1996. Available HTTP: www.thecb.state.tx.us. or webtexas.edu.

Texas Higher Education Coordinating Board. Annual Report On The TASP And The Effectiveness Of Remediation. (August 1995): n.pag. Online. Internet. Feb. 7, 1996. Available HTTP: www.thecb.state.tx.us. or webtexas.edu.

Texas Higher Education Coordinating Board. Report On Academic Advising. (July 1995): n.pag. Online. Internet. Feb. 7, 1996. Available HTTP: www.thecb.state.tx.us. or webtex.edu.

Texas Higher Education Coordinating Board. TASP Policy Manual. Austin: THECB, 1995.

"Texas Students Do Better On College Entrance Test." The Monitor (McAllen) August 15, 1996. 8D.

U.S. Department of Commerce. 1990 Tiger/Census Tract CD and Street Index. Washington, D.C.: Bureau of the Census, 1990.

U.S. Department of Education. The Condition of Education. Washington, D.C.: General Printing Office, 1995.

University of Texas-Pan American. Student Orientation Guidebook. Edinburg, TX: UTPA Printing Office, 1996.

Weis, Lois, Ed. Class, Race, And Gender In American Education. Albany, NY: SUNY Press, 1988.

Worthen, B. "Critical Issues That Will Determine The Future Of Alternative Assessment." Educational Leadership 43 (1993): 37-39. Cited In William L. Sanders and Sandra P. Horn. "Educational Assessment Reassessed: The Usefulness Of Standardized And Alternative Measures Of Student Achievement As Indicators For The Assessment Of Educational Outcomes." Education Policy Analysis Archives 3.6 (Mar. 3, 1995): n.pag. Online. Internet. Feb. 15, 1996. Available HTTP: seamonkey.ed.asu.edu/epaa.

Wright, Claudia R., and William B. Michael. "The Relationship Of Average Scores Of Seniors In 172 Southern California High School Statewide Standardized Achievement Tests To Percentage Of Limited-English Proficient Speakers." Educational and Psychological Measurement 49 (1989): 937-944.

APPENDIX

```
Login> : CO
USERNAME: WWATKINS
PASSWORD: *****

$: spss/nomanager
SPSS>: DATA LIST/ ID 1-3 DIST 4 TASP 5 CPGA 6 ACT 7
Continue: REMED 8 ADMS 9 ACAD 10 RACE 11 INC 12 VAL 13
Continue: PARED 14 DISTVAL 15 TAAS 16 TEXP 17 TSRV 18
Continue: DROP 19
SPSS>: VARIABLE LABELS/ DIST 'SCHOOL DISTRICT' TASP
Continue: 'TASP PERFORMANCE' CPGA 'COLLEGE GPA' ACT
Continue: 'ACT COMPOSITE' REMED 'REMEDICATION STATUS'
Continue: ADMS 'ADMISSIONS STATUS' ACAD 'ACADEMIC STATUS'
Continue: RACE 'ETHNICITY' INC 'PARENT INCOME' VAL
Continue: 'PARENT HOME VALUE' PARED 'PARENT EDUCATION'
Continue: DISTVAL 'TAX VALUE PER PUPIL' TAAS 'TAAS PASSING
Continue: RATE' TEXP 'TEACHING EXPERIENCE' TSRV 'TEACHING
Continue: SERVICE' DROP 'DROPOUT RATE'
SPSS>: VALUE LABELS/ TASP 0 'FAIL' 1 'PASS'
Continue: CPGA TO ACT 0 'LOW' 1 'HIGH' REMED 0 'FAIL'
Continue: 1 'PASS' ADMS 0 'PEP' 1 'REGULAR' RACE 0
Continue: 'MEXICAN-AMERICAN' 1 'ANGLO' INCOME TO DROP
Continue: 0 'LOW' 1 'HIGH'
SPSS>: CROSSTABS TABLES=TASP BY CPGA TO DROP/
SPSS>: STATISTICS=ALL/
SPSS>: BEGIN DATA
Data>: (Enter 150 Cases)
Data>: END DATA
SPSS>: SAVE OUTFILE=TASPDATA/
SPSS>: FINISH.
```

```

Login      : CO
USERNAME: WWATKINS
PASSWORD: *****

```

```

      $: spss/nomanager
    SPSS>: DATA LIST/ TASP 1-3 GPA 4-5 ACT 6-7 REMED 8 ADMS
Continue: 9 ACAD 10 RACE 11 INC 12-14 VAL 15-17 PARED 18
Continue: DISTVAL 19-21 TAAS 22-23 TEXP 24-25 TSRV 26-27
Continue: DROP 28-29
    SPSS>: REGRESSION DESCRIPTIVES/VARIABLES=TASP TO DROP/
Continue: STATISTICS=ALL/DEPENDENT=TASP/METHOD=STEPWISE/
    SPSS>: BEGIN DATA
Data>: (Enter 150 Cases)
Data>: END DATA
    SPSS>: SAVE OUTFILE=PRINCE/
    SPSS>: FINISH

```

```

Login      :CO
USERNAME:WWATKINS
PASSWORD:*****

```

```

      $:spss/nomanager
    SPSS>:GET FILE=PRINCE
Continue:<press return>
    SPSS>:REGRESSION DESCRIPTIVES/VARIABLES=TASP TO DROP/
Continue:STATISTICS=ALL/DEPENDENT=TASP/METHOD=ENTER
    SPSS>:SAVE OUTFILE=PRINCE/
    SPSS>:FINISH

```