

**THE BEST SCHOOL DISTRICTS IN TEXAS
FOR AFRICAN-AMERICAN STUDENTS 2000-2003**

A REPORT OF THE
TEXAS EDUCATIONAL EXCELLENCE PROJECT

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The Texas Educational Excellence Project (TEEP) is a program housed within the Department of Political Science at Texas A&M University. The project also has research associates at the University of Kansas, the University of Texas - Pan American, and the University of Wisconsin - Milwaukee. TEEP seeks to apply scholarly research to educational policy issues in order to make recommendations for greater quality and equity in Texas school systems.

The Best School Districts in Texas for African-American Students 2000-2003

Minority students in Texas have consistently improved their scores on the Statewide TAAS exam. The 2003 TAKS exam shows that the gap between African American students and Anglo students' scores continues to narrow. Though African American students have made significant improvements the score gap remains a serious issue. However, despite statewide disparities there are several districts that are doing excellent. The Texas Educational Excellence Project believes that in order to improve black tests scores, the school districts that do a better job of educating black students should be identified. Other districts can improve performance by applying the programs and policies of successful districts.

Ferris and Hooks independent school districts are excellent examples of the success that can be achieved when proactive measures are taken to improve the education of students. Ferris, which is ranked first among Texas school districts in this report, has approximately a 10% African American population. Ferris has adopted initiatives such as a pre-K program that identifies students that are able to attend school early in order to attend school early, in addition to a quality nutritional program. Ferris also uses a Reading Recovery Program, which allows first and second graders who need to sharpen their reading skills to work closely with a teacher. Another program Ferris has adopted is an Accelerated Reader Program in which junior high and high school students are regularly tested on their knowledge of assigned material. This program has been attributed to improving ACT and SAT scores.

Similarly, Hooks Independent school district, which ranks second on our list, credits the success of their high school students with early initiatives that the district takes in the students' education. Hooks ISD was also the first district in Texas to install a program called Curriculum Advantage, which is designed to prepare students for standardized testing. In addition to the programs that Hooks has installed, they credit their teaching philosophy of moving their students forward together. Children are not grouped; rather, educators take extra measures to ensure that all students are learning.

The Texas Educational Excellence Project uses a technique of analysis known as multiple regressions to identify school districts that do a better job of educating black students. This analytical tool makes it possible to develop generalizations about the overall performance of Texas school districts in how well they educate black students, while also providing information that can be used to make comparisons across individual school districts.

Our model is based on what is generally known as an education "production function" where student performance (defined as black pass rates on state standardized tests) is a function of inputs into the educational process, such as operating expenditures, student-teacher ratios, and various educational policies. Estimation of this production function results in predictions about how well districts are expected to do, given the level

of inputs available to them. Based on the results of the production function model, we compare how well districts *actually* perform to how well the statistical model *predicts* they should perform based on their inputs. The difference, if any, between the actual results and the predictions indicates how well districts are doing in educating black students.

An Education Production Function

School districts are organizations; they receive inputs (resources and students) from their environment and produce outputs (educated students among others). A vast literature has designated a variety of education production functions whereby the outputs of school systems can be evaluated relative to their inputs (Burtless 1996; Smith 1995; Hanushek 1986; 1989; 1996).

Our dependent variable is the school district's pass rate for black students on the TAAS and TAKS exams.¹ Texas requires all school districts to administer exams to students in several grades on an annual basis. We make no claim that results on TAAS or TAKS exams account for the overall learning experience of black students. Student performance is a multi-dimensional concept that can be measured in a variety of ways. However, pass rates on these exams *do* measure whether students are picking up basic academic skills from grade to grade. Our dependent variable, therefore, focuses primarily on how well districts perform in teaching black students basic skills, and should not be construed as an overall measure of black student learning.

The independent variables fall into four general types--environmental constraints, financial resources, teacher qualifications, and district policies. Environmental constraints are factors that restrict agency performance; in the case of education the key constraint is how difficult/easy it is to educate students. In the context of education policy, poverty is a serious constraint on student performance.

The measures of constraint are the percent of poor students (defined as those eligible for free school lunches) and the percentage of black families that live in poverty. We also measure the educational level of blacks in the school district using the percentage of blacks in the school district over age 25 with at least a high-school diploma. The education variable should be positively related to student performance and the other two measures should be negatively related to black pass rates.

Financial resources are the raw materials of any organization's attempt to meet its goals. Three measures of financial resources are included--per student instructional funds, average teacher's salary, and percent of funds received via state aid. These represent total resources devoted to education, the attractiveness of teaching positions in a competitive marketplace, and state efforts to overcome the unequal distribution of local financial

¹Beginning the 2002-2003 school year, Texas changed their test from the Texas Assessment of Academic Skills to the Texas Assessment of Knowledge and Skills. While there are some differences between these two tests, the correlation between them is very high. For this reason, this analysis uses the TAAS scores for the first 2 years of data and the TAKS scores for the last year.

resources. The relationship between expenditures and educational outcomes is one of the most contested questions in all of educational policy. Hanushek (1986; 1989; 1996) contends that there is no consistent relationship between money and student outcomes. Although others have challenged this finding (Hedges and Greenwald 1996), it remains conventional wisdom. In recent longitudinal studies, however, Murray (1995), Evans, Murray and Schwab (1997), and Murray, Evans and Schwab (1995) found that districts that increased expenditures had improved performance afterward. Bohte (1999) found that expenditures were correlated with higher test scores even when controlling for the previous year's test scores. We consider expenditures a critical variable for inclusion in the model. All relationships should be positive.

The two teacher qualification measures (or lack thereof) are the percent of teachers who hold a temporary certification in a subject specialty (as opposed to a permanent certification) and the average number of years of teacher experience. The relationship for non-certification should be negative, while the expectation is that more experienced teachers will lead to higher student performance.

Finally, the education production function contains three policy measures--the percentage of students taking gifted classes, class size, and student attendance (percent attending on an average day). Performance should be positively related to gifted classes and attendance and negatively related to class size.

Texas has a large number of school districts; many are very small or deal with a homogeneous student body. In an effort to use a set of organizations relatively similar in the tasks they perform, we have restricted our analysis to school districts with at least 1000 students and at least 10 percent black students. These restrictions resulted in a total of 159 districts in the study.

The data analysis is a pooled time series with data from the years 2000 through 2003. In any pooled time series one needs to control for serial correlation resulting from any trend in the variables over time. A series of dummy variables are introduced to achieve this control.

The basic production function is shown in Table 1. Several variables are powerful predictors of the black student pass rate. These include background and policy variables. The black student pass rate is strongly influenced by the percentage of black adults age 25 and older with at least a high school education. Attendance is also strongly and positively related to the black student pass rate. The greater the percentage of low-income students in the district, the lower the black student pass rate. Additionally, teacher salary and teacher experience are significant positive predictors of student pass rate. No other variable achieved statistical significance.

The results of this model allow us to compare school districts as to how well they do above (or below) expectations. As an illustration, the model predicted that the Ferris Independent School District would have an average black pass rate of 61.5% from 2000-2003; Ferris' actual pass rate was 78.0%. Based on this method, the top ranked school

district for black students in Texas was Ferris with a +16.50 score closely followed Hooks with a +16.02 score and Atlanta with a score of +15.23.

The top forty districts are shown in Table 2. The first column is the numerical score on which the districts are ranked. The second column is the average pass rate for black students from 2000 to 2003 and the third column is the ranking score for 2003 only. These forty districts represent a variety of different types of school districts located throughout the state. Table 3 reports the 25 best districts for black students in 2003 only. Galena Park ISD and Tatum ISD led the districts with high pass rates for 2003. Recent gains are likely the result of the benefits of policies adopted earlier so these are the districts that are likely to continue to be rated highly in future studies.

Although our top 25 includes districts of all sizes, large districts often cannot change as rapidly as small districts simply because so many students are involved. Table 4 presents the top ten large districts (those with 15,000 or more students). Galena Park, Aldine, and Abilene top this list of large districts. The final table in the Appendix gives an alphabetical listing of all of the school districts examined in this study, along with their scores. Any person interested in a specific school district can examine the Appendix to locate that district and identify the score and rank.

Conclusion

This study has identified those school districts in Texas that performed better than expected on the TAAS and TAKS pass rate for black students. These districts can serve as role models for other districts in Texas. The districts have a wide variety of programs for early diagnosis, coordination of curriculum, and parental involvement. Not all of the districts use the same approach, indicating that success can be attained in a multiplicity of ways. If effective programs and performances from these districts are identified, then they can be transferred to other districts with an overall benefit to black students.

Although this study only examines exemplary districts, that should not detract from the relatively low over-all pass rate for black students in Texas. A great deal of additional improvement is needed in these districts as well as other districts to close the test gap between black and Anglo students. Substantial progress has been made in the last few years; a great distance remains to be covered. Improving educational opportunities for all Texas children requires a long-term commitment to education. Problems develop over a period of decades; solutions require both time and hard work.

Table 1. Regression Results for African American Performance

	African American Pass Rate
Percent Low Income	-0.104 (3.75)**
Percent Gifted	0.008 (0.08)
Attendance	2.033 (3.96)**
Average Teacher Salary K	0.604 (2.76)**
Class Size	0.045 (0.11)
Teacher Experience	0.584 (2.97)**
Non-Certified Teachers	-0.058 (0.58)
State Aid	-0.006 (0.33)
Instructional Expenditures	0.001 (0.95)
High School Education	18.716 (3.34)**
% Poverty Background	-7.224 (1.79)
2001	1.932 (2.24)*
2002	6.732 (7.46)**
2003	-20.709 (19.29)**
Constant	-158.867 (3.08)**
Observations	632
R-squared	0.69

Absolute value of t statistics in parentheses

* significant at 5%; ** significant at 1%

Table 2. Top 40 Districts

Rank	District	Score	Pass Rate	2003 Score
1	FERRIS ISD	16.50	78.00	11.84
2	HOOKS ISD	16.02	83.12	14.19
3	ATLANTA ISD	15.23	82.07	3.88
4	NEW BOSTON ISD	15.04	84.05	6.94
5	ANGLETON ISD	14.70	87.85	15.59
6	GALENA PARK ISD	13.72	81.28	18.14
7	NEWTON ISD	12.97	74.55	12.28
8	PITTSBURG ISD	12.56	76.20	11.69
9	SULPHUR SPRINGS ISD	12.45	81.18	13.02
10	TATUM ISD	12.32	77.28	15.67
11	EL CAMPO ISD	10.99	77.55	12.35
12	HILLSBORO ISD	10.49	71.70	7.60
13	SWEENEY ISD	10.31	83.28	7.79
14	DEL VALLE ISD	10.11	72.18	9.46
15	CUERO ISD	10.06	75.10	12.61
16	KOUNTZE ISD	9.70	72.53	-1.63
17	DENISON ISD	8.52	77.45	4.89
18	WOODVILLE ISD	8.42	71.72	9.15
19	COLUMBIA-BRAZORIA ISD	8.31	77.07	1.78
20	QUEEN CITY ISD	7.69	69.88	-1.92
21	RICE CONS ISD	7.67	68.35	-0.66
22	ALDINE ISD	7.38	75.03	7.83
23	LUFKIN ISD	6.67	72.25	10.47
24	ABILENE ISD	6.38	76.10	9.03
25	MCGREGOR ISD	6.09	73.68	-6.03
26	LONGVIEW ISD	5.44	71.00	5.83
27	WHARTON ISD	5.19	70.97	0.64
28	BAY CITY ISD	4.96	68.12	-1.95
29	MANSFIELD ISD	4.82	79.55	6.01
30	LA MARQUE ISD	4.75	70.10	-2.31
31	WACO ISD	4.68	65.00	0.62
32	TERRELL ISD	4.43	67.78	5.15
33	DAINGERFIELD-LONE STAR ISD	4.39	71.75	2.33
34	COMMERCE ISD	4.32	67.72	0.22
35	LAMAR CONSOLIDATED ISD	4.16	71.65	2.98
36	CYPRESS-FAIRBANKS ISD	4.09	79.57	10.46
37	GOOSE CREEK CISD	3.90	71.50	3.43
38	MEXIA ISD	3.38	66.90	-1.80
39	SILSBEE ISD	3.37	68.57	5.77
40	GROESBECK ISD	3.30	68.90	-12.18

Table 3. Top 25 Districts for 2003

Rank	District	Score	Pass Rate	2003 Score
1	GALENA PARK ISD	13.72	81.28	18.14
2	TATUM ISD	12.32	77.28	15.67
3	ANGLETON ISD	14.70	87.85	15.59
4	HOOKS ISD	16.02	83.12	14.19
5	SULPHUR SPRINGS ISD	12.45	81.18	13.02
6	CUERO ISD	10.06	75.10	12.61
7	EL CAMPO ISD	10.99	77.55	12.35
8	NEWTON ISD	12.97	74.55	12.28
9	FERRIS ISD	16.50	78.00	11.84
10	PITTSBURG ISD	12.56	76.20	11.69
11	LUFKIN ISD	6.67	72.25	10.47
12	CYPRESS-FAIRBANKS ISD	4.09	79.57	10.46
13	DEL VALLE ISD	10.11	72.18	9.46
14	WOODVILLE ISD	8.42	71.72	9.15
15	ABILENE ISD	6.38	76.10	9.03
16	ALDINE ISD	7.38	75.03	7.83
17	SWEENY ISD	10.31	83.28	7.79
18	HILLSBORO ISD	10.49	71.70	7.60
19	CARROLLTON-FARMERS BRANCH ISD	2.06	77.75	7.06
20	NEW BOSTON ISD	15.04	84.05	6.94
21	GIDDINGS ISD	-0.20	65.30	6.83
22	GRAND PRAIRIE ISD	1.11	70.82	6.77
23	ROCKDALE ISD	-0.22	66.93	6.51
24	TEXARKANA ISD	1.96	65.15	6.02
25	MANSFIELD ISD	4.82	79.55	6.01

Table 4. Top 10 Large Districts (15,000 + Students)

Rank	District	Score	Pass Rate	2003 Score
1	GALENA PARK ISD	13.72	81.28	18.14
2	ALDINE ISD	7.38	75.03	7.83
3	ABILENE ISD	6.38	76.10	9.03
4	MANSFIELD ISD	4.82	79.55	6.01
5	WACO ISD	4.68	65.00	0.62
6	LAMAR CONSOLIDATED ISD	4.16	71.65	2.98
7	CYPRESS-FAIRBANKS ISD	4.09	79.57	10.46
8	GOOSE CREEK CISD	3.90	71.50	3.43
9	GARLAND ISD	3.25	74.18	5.58
10	HOUSTON ISD	2.79	68.30	1.59

Appendix. Scores for All Schools

Rank	District	Score	Pass Rate	2003 Score
24	ABILENE ISD	6.38	76.10	9.03
22	ALDINE ISD	7.38	75.03	7.83
120	ALIEF ISD	-4.45	66.93	-3.10
54	AMARILLO ISD	1.99	65.72	5.09
93	ANAHUAC ISD	-1.54	63.68	-2.09
5	ANGLETON ISD	14.70	87.85	15.59
110	ARLINGTON ISD	-3.32	69.38	0.96
129	ATHENS ISD	-5.50	60.20	1.90
3	ATLANTA ISD	15.23	82.07	3.88
80	BASTROP ISD	-0.25	62.62	-1.13
28	BAY CITY ISD	4.96	68.12	-1.95
75	BEAUMONT ISD	-0.13	66.47	-2.45
150	BELLVILLE ISD	-9.29	58.47	-12.17
126	BRENHAM ISD	-5.40	59.80	-1.34
45	BRYAN ISD	2.76	62.90	2.52
102	CALDWELL ISD	-2.41	62.15	-2.88
112	CAMERON ISD	-3.51	61.62	-1.10
53	CARROLLTON-FARMERS BRANCH ISD	2.06	77.75	7.06
153	CARTHAGE ISD	-11.50	57.83	-6.00
139	CEDAR HILL ISD	-6.65	67.78	-5.56
114	CENTER ISD	-3.56	59.25	-8.90
71	CHANNELVIEW ISD	0.07	70.80	-3.41
151	CHAPEL HILL ISD	-10.76	55.65	-7.67
127	CLARKSVILLE ISD	-5.48	57.95	-14.63
148	CLEVELAND ISD	-7.88	51.50	-11.01
83	COLDSRING-OAKHURST CONS ISD	-0.36	54.95	1.01
149	COLLEGE STATION ISD	-7.91	65.82	-1.09
19	COLUMBIA-BRAZORIA ISD	8.31	77.07	1.78
154	COLUMBUS ISD	-12.01	57.80	-16.12
34	COMMERCE ISD	4.32	67.72	0.22
99	CONNALLY ISD	-2.19	67.93	-2.88
47	COPPERAS COVE ISD	2.65	74.05	4.14
123	CORRIGAN-CAMDEN ISD	-4.67	53.03	-5.98
104	CORSICANA ISD	-2.54	61.12	-2.58
143	CROCKETT ISD	-7.04	52.85	-3.01
72	CROSBY ISD	0.02	69.85	0.95
79	CROWLEY ISD	-0.24	78.25	0.43
15	CUERO ISD	10.06	75.10	12.61
36	CYPRESS-FAIRBANKS ISD	4.09	79.57	10.46
33	DAINGERFIELD-LONE STAR ISD	4.39	71.75	2.33
137	DALLAS ISD	-6.58	61.25	-3.40
89	DAYTON ISD	-1.04	61.43	-6.37
14	DEL VALLE ISD	10.11	72.18	9.46
17	DENISON ISD	8.52	77.45	4.89

62	DENTON ISD	1.01	68.78	2.01
81	DESOTO ISD	-0.33	71.75	-1.02
43	DIBOLL ISD	3.01	61.75	2.32
97	DICKINSON ISD	-1.82	61.65	4.93
82	DUNCANVILLE ISD	-0.33	72.12	3.01
113	EAST CENTRAL ISD	-3.55	68.27	-4.13
142	EAST CHAMBERS ISD	-7.04	55.95	-3.64
117	EDNA ISD	-4.02	59.92	-6.69
11	EL CAMPO ISD	10.99	77.55	12.35
152	ELGIN ISD	-11.35	51.83	-16.65
65	ENNIS ISD	0.64	68.65	2.87
49	EVERMAN ISD	2.43	70.40	-1.68
138	FAIRFIELD ISD	-6.60	62.83	-4.72
1	FERRIS ISD	16.50	78.00	11.84
107	FORT BEND ISD	-2.89	73.32	-1.48
101	FORT WORTH ISD	-2.29	61.25	1.28
6	GALENA PARK ISD	13.72	81.28	18.14
48	GALVESTON ISD	2.53	64.53	4.22
41	GARLAND ISD	3.25	74.18	5.58
77	GIDDINGS ISD	-0.20	65.30	6.83
103	GILMER ISD	-2.46	63.25	-3.54
116	GLADEWATER ISD	-3.83	60.55	-1.00
91	GONZALES ISD	-1.25	59.20	3.58
37	GOOSE CREEK CISD	3.90	71.50	3.43
61	GRAND PRAIRIE ISD	1.11	70.82	6.77
144	GREENVILLE ISD	-7.16	54.50	-11.18
40	GROESBECK ISD	3.30	68.90	-12.18
122	HALLETTSVILLE ISD	-4.62	67.32	-12.21
46	HARDIN-JEFFERSON ISD	2.66	69.57	5.96
155	HEARNE ISD	-13.06	46.58	-11.25
157	HEMPSTEAD ISD	-14.65	51.30	-11.61
111	HENDERSON ISD	-3.40	61.10	-0.54
12	HILLSBORO ISD	10.49	71.70	7.60
158	HITCHCOCK ISD	-15.47	50.60	-19.65
2	HOOKS ISD	16.02	83.12	14.19
44	HOUSTON ISD	2.79	68.30	1.59
64	HUNTSVILLE ISD	0.70	66.55	-0.21
59	IRVING ISD	1.30	72.78	2.86
118	JACKSONVILLE ISD	-4.21	55.45	1.90
108	JASPER ISD	-3.11	62.18	-7.61
85	JEFFERSON ISD	-0.42	64.00	-2.35
106	JUDSON ISD	-2.70	69.28	1.24
51	KENNEDALE ISD	2.12	73.95	3.78
105	KILGORE ISD	-2.68	61.53	-3.67
90	KILLEEN ISD	-1.09	70.12	3.41
134	KLEIN ISD	-6.33	72.12	-1.62

16	KOUNTZE ISD	9.70	72.53	-1.63
50	LA GRANGE ISD	2.36	69.10	3.47
30	LA MARQUE ISD	4.75	70.10	-2.31
86	LA VEGA ISD	-0.84	62.47	-7.36
35	LAMAR CONSOLIDATED ISD	4.16	71.65	2.98
128	LANCASTER ISD	-5.48	61.53	-5.47
96	LIBERTY ISD	-1.79	67.03	-2.82
74	LIBERTY-EYLAU ISD	-0.06	64.97	-5.27
69	LIVINGSTON ISD	0.20	63.30	2.75
26	LONGVIEW ISD	5.44	71.00	5.83
87	LUBBOCK ISD	-1.03	65.18	-1.94
23	LUFKIN ISD	6.67	72.25	10.47
98	MADISONVILLE CONS ISD	-2.19	60.70	3.74
88	MALAKOFF ISD	-1.03	62.33	2.60
147	MANOR ISD	-7.35	54.60	-8.55
29	MANSFIELD ISD	4.82	79.55	6.01
156	MARLIN ISD	-14.58	44.88	-15.62
56	MARSHALL ISD	1.65	68.72	3.85
25	MCGREGOR ISD	6.09	73.68	-6.03
52	MESQUITE ISD	2.09	74.20	4.26
38	MEXIA ISD	3.38	66.90	-1.80
58	MOUNT PLEASANT ISD	1.48	64.45	1.07
119	NACOGDOCHES ISD	-4.41	59.95	0.04
121	NAVASOTA ISD	-4.58	57.25	-4.44
4	NEW BOSTON ISD	15.04	84.05	6.94
7	NEWTON ISD	12.97	74.55	12.28
131	NORTH FOREST ISD	-6.10	57.17	-10.19
133	PALESTINE ISD	-6.26	59.03	-2.84
70	PARIS ISD	0.12	65.60	0.04
84	PFLUGERVILLE ISD	-0.36	73.50	-0.52
8	PITTSBURG ISD	12.56	76.20	11.69
66	PORT ARTHUR ISD	0.53	61.28	-0.92
20	QUEEN CITY ISD	7.69	69.88	-1.92
21	RICE CONS ISD	7.67	68.35	-0.66
125	RICHARDSON ISD	-5.30	70.05	3.89
78	ROCKDALE ISD	-0.22	66.93	6.51
115	ROYAL ISD	-3.62	61.12	-6.53
145	RUSK ISD	-7.19	56.05	-6.72
68	SABINE ISD	0.50	69.25	0.54
146	SEALY ISD	-7.26	62.55	-11.58
109	SHELDON ISD	-3.23	67.10	0.98
42	SHEPHERD ISD	3.11	62.45	-3.08
94	SHERMAN ISD	-1.65	64.45	4.06
39	SILSBEE ISD	3.37	68.57	5.77
130	SMITHVILLE ISD	-5.73	59.15	-4.04
92	SPRING ISD	-1.39	71.20	2.36

60	STAFFORD MUNICIPAL SCHOOL DISTRICT	1.21	76.35	5.52
9	SULPHUR SPRINGS ISD	12.45	81.18	13.02
13	SWEENEY ISD	10.31	83.28	7.79
10	TATUM ISD	12.32	77.28	15.67
76	TAYLOR ISD	-0.14	62.30	4.09
132	TEAGUE ISD	-6.16	65.68	1.53
95	TEMPLE ISD	-1.77	63.10	2.73
32	TERRELL ISD	4.43	67.78	5.15
55	TEXARKANA ISD	1.96	65.15	6.02
57	TEXAS CITY ISD	1.51	70.55	-0.70
124	TRINITY ISD	-5.02	52.85	-7.00
67	TYLER ISD	0.53	68.50	4.16
31	WACO ISD	4.68	65.00	0.62
135	WALLER ISD	-6.46	62.25	-3.94
140	WAXAHACHIE ISD	-6.71	63.53	-1.00
73	WEST ORANGE-COVE CONS ISD	-0.05	62.50	-7.26
100	WEST OSO ISD	-2.21	58.70	-4.98
141	WESTWOOD ISD	-7.03	63.45	-3.85
27	WHARTON ISD	5.19	70.97	0.64
63	WICHITA FALLS ISD	1.01	68.10	2.21
136	WILMER-HUTCHINS ISD	-6.52	53.80	-7.81
18	WOODVILLE ISD	8.42	71.72	9.15