Revisiting the Myth of the Texas Miracle in Education: Lessons about Dropout Research and Dropout Prevention

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I Introduction

This paper extends an examination of grade enrollment and high school graduation patterns in Texas presented in "The Myth of the Texas Miracle in Education" (Haney, 2000). Using enrollment data from 1975-76 through 1999-2000, I examine the pattern apparent between flunking grade 9 and failure to persist in school to high school graduation. Before focusing on this particular topic, I provide a summary of the "Myth" article, supplemented by new evidence available since publication of that article in August 2000.

The Texas Assessment of Academic Skills (TAAS) was introduced in Texas in 1990-91. Since then TAAS testing has been the linchpin of educational accountability in Texas, not just for students, but also for educators and schools. A variety of evidence in the late 1990s led a number of observers to conclude that the state of Texas had made near miraculous educational progress on a number of fronts. Between 1994 and 1998, the percentage of students passing the three grade 10 TAAS tests had grown from 52% to more than 70%. Also, the racial gap in TAAS results seemed to have narrowed. Statistics from the Texas Education Agency (TEA) showed that over the same interval dropout rates had declined steadily. Finally, in 1997, release of results from the National Assessment of Educational Progress (NAEP) showed Texas 4th graders to have made more progress on NAEP math tests between 1992 and 1996 than those in any other state participating in state NAEP testing. These developments led to a flurry of praise for the apparent educational progress of the Lone Star State. Among the plaudits for Texas cited in the Myth article were those by Haycock, Palmaffy, Grissmer & Flanagan, the National

Education Goals Panel and editorial writers for a number of newspapers, including the Boston Globe and USA Today (see Haney, 2000, section 3.5 for more detail.) While I have not attempted to keep track of all commentary on education in Texas, one source perpetuating the myth of the Texas miracle that has come to my attention since last summer is worth mentioning. Skrla, Scheurich & Johnson (2000) have written a report based on research in four fairly large Texas districts. Based on analysis of district-generated documents, on-site observations and over 200 individual and group interviews, these researchers concluded that these districts have made dramatic changes in "teaching and learning practices in the classroom," and because of "changes in equity beliefs" and "the pursuit of educational equity and excellence," have produced "equitable educational success for literally all the children in their districts" (Skrla, Scheurich & Johnson, 2000, pp.6, 7, 39.)

II Summary and Update of "The Myth of the Texas Miracle in Education"

Despite such ongoing boosterism, a wide range of evidence indicates that the Texas "miracle" is mainly a myth and illusion. As recounted in the "Myth" article (Haney, 2000), one reason for this conclusion is the TAAS itself. As previously explained: 1) by any of the prevailing standards for ascertaining adverse impact, grade 10 TAAS results continue to show discriminatory adverse impact on Black and Hispanic students in Texas; 2) use of TAAS results in isolation to control award of high school diplomas is a clear violation of professional standards concerning appropriate test use; 3) the passing scores set on TAAS tests were arbitrary, discriminatory and failed to take measurement error into account; and 4) analyses comparing TAAS reading, writing and math scores with one another and with relevant high school grades raise doubts about the

reliability and validity of TAAS scores. Previously, I had suggested that TAAS developers erred in estimating the standard error of measurement on the TAAS because they based their estimates on internal consistency reliability estimates rather than alternate form reliability. While I had located test-retest correlations on the grade 10 TAAS (in the range of 0.30 to 0.50), these were all for restricted ranges of test takers (who retook the test because they failed to pass), I had found no good way to estimate the extent to which these remarkably low correlations were attenuated due to restriction of range. Nonetheless, based on published literature I suggested that it is common for tests showing internal consistency reliability of 0.90 to have alternate forms reliability in the range of 0.80 to 0.85. Based on this pattern, I suggested that the standard errors of measurement for TAAS tests were likely on the order of 20 to 40% greater than reported in the TAAS 1996-97 *Technical Manual* (see Haney, 2000, section 4.3). Now it appears that the TAAS tests are somewhat less reliable than these estimates suggest. In a study of TAAS scores for students in grades 3 through 8 in six Texas districts, Dworkin, at al. (1999, Table 2) report that the correlation between TAAS grade 6 scores in 1997 and grade 7 scores in 1998 were 0.802 for reading and 0.745 for math (corresponding correlations for lower grade levels were even lower). By way of contrast, the alternate form for reliability for SAT scores, from junior to senior years in high school have been reported to be in the range of 0.88 to 0.90 (Angoff, 1971, p. 29).

In the Myth article I showed that the passing scores on TAAS tests were set arbitrarily, and failed to take measurement error into account. Specifically, the passing scores on the three TAAS tests were arbitrarily set at 70% correct, without any evidence having been adduced that such passing scores reliably differentiated among students on

any criterion external to TAAS. Indeed, analyses comparing TAAS reading, writing and math scores with one another and with relevant high school grades raise doubts about the reliability and validity of TAAS scores. After the passing scores on TAAS were set in 1991, analysts sought to equate passing scores on new versions of TAAS tests using item response theory scaling (and scaled scores called the Texas leaning Index or TLI.) So, for the 30 TAAS administrations between fall 1991 and summer 1999, the passing scores on the exit-level version of TAAS varied only slightly, equivalent to 33 or 34 items correct out of 48 items total on the TAAS reading test and 40 to 42 of 60 items correct on the TAAS math test.

Now, however, according to a memo from Texas Commissioner of Education Jim Nelson, dated May, 1999/2000, it has become apparent that the passing scores on recent TAAS administrations have been lowered. In the five administrations between fall 2000 and fall 2000, the passing score on TAAS reading test varied from 27 to 31 correct, and on the TAAS math from 30 to 39 correct. Nelson sought to explain this apparent lowering of the TAAS passing score by saying that the 1998-99 school year was "the first year that TEKS items incorporated into the test, along with the EE items" (Nelson, 1999/2000, p. 1). Nelson went on to explain that "I want to be very clear that this year's raw scores will be lower than last year's due to the rigor of the test. That is normal and does not affect the validity of the test. These scores will be equated for difficulty in the same manner used since 1994" (Nelson, 1999/2000, p. 1).

Without having access to technical details on recent changes in TAAS content, I am a bit unsure of what to conclude about these developments. In effect Nelson is saying that the TAAS passing scores in 1999 were lowered in terms of raw scores because more

difficult items were included. But at a minimum, Nelson's explanation makes it clear that someone in the Texas Education Agency does not understand some of the basics of test equating. Formally-speaking, a zero-order requirement for equating two tests is that they be content equivalent (Holland & Rubin, 1982).

In Part 6 of the Myth article (Haney 2000), I sought to summarize the views of educators in Texas about TAAS, based on three statewide surveys of educators. These surveys were undertaken entirely independently, and surveyed somewhat different populations of educators. General findings from this review were as follows:

1. Texas schools are devoting a huge amount of time and energy preparing students specifically for TAAS.
2. Emphasis on TAAS is hurting more than helping teaching and learning in Texas schools.
3. Emphasis on TAAS is particularly harmful to at- risk students.
4. Emphasis on TAAS contributes to retention in grade and dropping out of school.

Survey results indicated that the emphasis on TAAS is contributing to dropouts from Texas schools not just of students, but also teachers. In one survey, reading specialists were asked whether they agreed with the following statement:

> It has also been suggested that the emphasis on TAAS is forcing some of the best teachers to leave teaching because of the restraints the tests place on decision making and the pressures placed on them and their students.

A total of 85% of respondents agreed with this statement.

In another survey, teachers volunteered comments such as the following: "Mandated state TAAS Testing is driving out the best teachers who refuse to resort to teaching to a low level test!"

In part 7 of the Myth article, among other things, I examined SAT scores for Texas students as compared with national results. Evidence indicates that at least as

measured by performance on the SAT, the academic learning of secondary school students in Texas has not improved since the early 1990s, at least as compared with SAT-takers nationally. Indeed results from 1993 to 1999 on the SAT-M indicate that the learning of Texas student has deteriorated relative to students nationally (and this result holds even after controlling for percentage of high school graduates taking the SAT).

Part 7 also revisited NAEP results for Texas. Results for eight state NAEP assessments conducted between 1990 and 1998 were reviewed. Because of the doubtful meaningfulness of the NAEP achievement levels, NAEP results for Texas and the nation were compared in terms of NAEP test scores. In order to compare NAEP results with those from TAAS, the "effect size" metric (from the meta-analysis literature) was employed. This review of NAEP results from the 1990s, showed that grade 4 and grade 8 students in Texas performed much like students nationally. On some NAEP assessments Texas students scored above the national average and on some below. In the two subject areas in which state NAEP assessments were conducted more than once during the 1990s, there is evidence of modest progress by students in Texas, but it is much like the progress evident for students nationally. Reviewing NAEP results for Texas by ethnic group, we see a more mixed picture. In many comparisons, Black and Hispanic students show about the same gain in NAEP scores as White students, but the 1998 NAEP reading results indicate that while White grade 4 reading scores in Texas have improved since 1992, those of Black and Hispanic students have not. More generally, however, the magnitudes of the gains apparent on NAEP for Texas fail to confirm the dramatic gains apparent on TAAS. Gains on NAEP in Texas are consistently far less than half the size (in standard deviation units) of Texas gains on state NAEP assessments. These results

indicate that the dramatic gains on TAAS during the 1990s are more illusory than real. It is worth adding that this same conclusion was reached by Klein, Hamilton, McCaffrey & Stecher (2000) as a result of their examination of state NAEP results for Texas.

III Patterns of Grade Enrollment Progress and High School Completion in Texas

In pages above, I summarized many of the major portions of the August 2000 "Myth of the Texas Miracle in Education" article (Haney 2000). One major portion not yet treated is analyses of grade enrollment data for Texas. The reason is that this line of inquiry is particularly relevant to the overall topic of this conference, namely dropout research. Before describing enrollment analyses, let me first explain why they were undertaken; namely, because I came to the conclusion that dropout statistics reported by the TEA were untrustworthy.

3.1 Problems in TEA Dropout Statistics

As mentioned above, the TEA had reported that dropout rates were decreasing in Texas during the 1990s. However, in 1998 when I began studying what had been happening in Texas schools, I quickly became suspicious of the validity of the TEA-reported dropout data. At least one independent organization in Texas had previously challenged TEA's "dropout calculation methodology" (TRA, 1998, p. 2). Moreover, two independent sources were reporting substantially higher rates of dropouts (or attrition) or, conversely, lower rates of high school completion than would be implied by TEA dropout data (Fassold, 1996; IDRA, 1996). Additionally, I subsequently learned that a November 1999 report from the Texas House Research Organization, *The Dropout Data Debate*, recounts that "In 1996, the State Auditor's Office estimated that the 1994 dropout

numbers reported by the Texas Education Agency (TEA) likely covered only half of the actual number of dropouts" (p. 1). The report goes on to recount numerous problems in TEA's approach to calculating dropout rates including changing rules over time in how to define dropouts, relying on district reports of dropouts, while at the same time, beginning in 1992-93 using dropout rate as a key factor TEA's accountability ratings of districts, and apparent fraud in district reporting. The TEA developed a system for classifying school leavers in dozens of different ways and many types of "leavers" are not counted as dropouts. Indeed in 1994, the TEA started classifying students who "met all graduation requirements but failed to pass TAAS" as non-dropout "leavers."

3.2 Enrollment Progression Analyses

Hence, in order to examine independent evidence on patterns of high school completion in Texas and possible effects of the TAAS on grade enrollment patterns and high school completion, I assembled data on the numbers of White, Hispanic and Black students enrolled in every grade (kindergarten to grade 12) in Texas over the last two decades.[1]

In a first set of analyses, I simply took the numbers of White, Black and Hispanic Texas high school graduates by year and divided each of these numbers respectively by the number of White, Black and Hispanic students enrolled in grade nine three years earlier. The resulting ratios show the proportion of grade nine students for each ethnic group who progress on time to high school graduation three-and-a-half years later.

[1] In the Myth article, I explain how these data were assembled and checked for accuracy. Also, at the time of completion of this article enrollment data were only available through the 1998-99 school year. Enrollment data are nowavailable for the 1999-2000 school year, but not yet data on high school graduates.

Without describing all analyses undertaken along these lines, Figure 3.1 shows one illustrative result.

[Inset Figure 3.1 here]

This figure shows the ratio of the number of Texas high school graduates divided by the number of grade nine students three years earlier for White and Nonwhite (that is Black and Hispanic) students. What this figure shows is that since the three-year period of 1990-92 in which the TAAS exit test requirement was phased in, the gap in this ratio for White and Nonwhite students has widened substantially. Specifically, during the period 1978 through 1989, the average gap in the ratios graphed in Figure 3.1 was 0.146. However, the average gap in the ratios for Whites and Nonwhites since the TAAS exit test requirement was fully implemented in 1992-93 has been 0.215. This indicates that the TAAS exit test has been associated with a 50% increase in the gap in progression from grade 9 to high school graduation for Nonwhite students as compared with White students.

In order to understand these results better, I next calculated grade to grade progression ratios of the number of students enrolled in one grade divided by the number of students enrolled in the previous grade in the previous year, separately for the Black, Hispanic and White ethnic groups. Altogether 858 such calculations were computed – 13 grade transitions (from kindergarten to grade 1, etc., to grade 12 to high school graduation) for 22 years and three ethnic groups. Again, without trying to recap all results from these analyses, shown in Figure 3.2 are some of the most interesting.

[Inset Figure 3.2 here]

What this figure shows is that over the last 20 years, the grade 9/grade 8 progression ratio for Black and Hispanic students has risen dramatically, while the comparable rate for White students increased only slightly. The data also reveal that before the mid-1980s, the grade9/grade8 progression ratios for Black and Hispanic students were only slightly higher than those for Whites. These results clearly indicate that since 1992 progress from grade 9 to high school graduation has been stymied for Black and Hispanic students not after grade 10 when they first take the TAAS exit test, but in grade nine before they take the TAAS exit test. These results clearly suggest the possibility that after 1990 schools in Texas have increasingly been retaining students, disproportionately Black and Hispanic students, in grade nine in order to make their grade 10 TAAS scores look better,.

At the same time, it is apparent from Figure 3.2 that the higher rates of grade 9 retention of Black and Hispanic students, as compared White ones, did not begin with TAAS. The results indicate that the grade9/grade8 progression ratios for minorities began to diverge from those of White students in Texas in the 1980s, before TAAS and even before TEAMS (the Texas state test that preceded TAAS). In an historical sense then, TAAS and TEAMS testing could not have directly caused the steady increase since the early 1980s in the proportions of Black and Hispanics retained in grade 9. But the first statewide testing program in Texas, the TABS, did begin in 1980, just about when the ratio of minority ninth graders to eighth graders began its upward climb, compared to the relative stability of this ratio for White students. Whatever the historical cause, that fact that by the end of the 1990s 25-30% of Black and Hispanic students, as compared with only 10% of White students, were being retained to repeat grade 9, instead of being

promoted to grade 10, makes it clear that the apparent diminution in the racial gap in TAAS grade 10 pass rates is in some measure an illusion.

The sharp increase in grade 9 retention rates suggested a need to revisit the question of rates of progress toward high school graduation. This is because the grade 9 to high school graduation progress ratio may be lowered because of the increasing numbers of students "bunching up' in grade 9.

Hence a number of additional analyses were undertaken, examining the rates of progress from grades 6, 7, and 8 to high school graduation, six, five and four years later, respectively. For economy of presentation, here I present only one set of results showing rates of progress from grade 6 to high school graduation six years later for minority, that is, Black and Hispanic, students. These are presented for cohorts labeled by their expected year of high school graduation. The cohort class of 1999, for example, would have been in grade 6 in 1992-93.

Figure 3.3 shows the progress of minority (Black and Hispanic) cohorts from grade 6 to grades 8, 10, 11, 12 and high school graduation. As can be seen, over the last 20 years, for minority cohorts, close to 100% of grade 6 students appear to be progressing to grade 8 two years later. For minority grade 6 cohorts the rates of progress to higher grades were lower – for grade 6 cohorts of the classes of 1982-85 about 80% of Black and Hispanic students progressed on time to grades 11 and 12 and about 65% graduated.

[Inset Figure 3.3 here]

For minority cohorts of the classes of 1986 to 1990, there were mostly declines in rates of progress. Initially sharper declines were apparent in rates of progress to grades 10, 11, and 12, but the cohorts of the 1989 and 1990 classes showed some rebounds in

rates of progress to grades 10, 11 and 12 (and for the 1990 cohort to graduation). These patterns are associated with implementation of the first Texas high school graduation test, the TEAMS from 1985 to 1990.

In 1991, the initial year of TAAS testing, the grade 6 to high school graduation ratios fell precipitously; from 1990 to 1991, the ratio fell from 0.65 to 0.55 for minorities. From 1992 to 1996, this ratio held relatively steady for minorities at about 0.60. Since 1996, there have been slight increases in the high school graduation to grade six ratios, for minorities to almost 0.65.

Stepping back from specific results represented in Figures 3.3, three broad findings are apparent from these cohort progression analyses. First, the plight of Black and Hispanic students in Texas is not *quite* as bleak as it appeared when looking at grade 9 to high school graduation ratios – which showed only 50% since 1992 progressing from grade 9 to high school graduation. The bottom line in Figure 3.3 indicates that for most classes of the 1990s 60-65% of Black and Hispanic students progressed from grade 6 to graduate on-time six years later (the grade 9 to graduation ratios are lower because of the increasing rates of retention in grade 9).

Second, one of the major features of Figures 3.3 is that the bottom two lines (representing the grade 12 to grade 6, and graduation to grade 6 ratios) tend to converge over the last 20 years. This means that over this period, given that students make it to grade 12, they are increasingly likely to graduate. For minority classes of the early 1980s, about 80% were progressing on-time to grade 12, but only about 65% graduating. For minority classes of 1998 and 1999, 68-69% progressed to grade 12 and 64-65% to graduation on time. In other words, a major pattern revealed in this two figure is that

since high school graduation testing was introduced in Texas in the mid-1980s, one major change appears to have been that larger proportions of students who reach grade 12 do graduate.

The flip side of this pattern is that over this interval, smaller proportions of minority students are progressing as far as grade 12. For minority classes of the early 1980s around 80% progressed from grade 6 to grade 12 six years later, but by the 1970s only 70% were progressing on time to grade 12. The most obvious reasons for these substantial declines in progress from grade 6 to grade 12 six years later are increased rates of retention in grades before 12 and increased rates of dropping out before grade 12.

After conducting a variety of analyses Texas enrollment data, I sought (in part 7 of Haney 2000) to review five different sources of evidence about rates of high school completion to see if sharp differences apparent in these source could be reconciled. A review of statistics on numbers of students, in Texas and nationally, taking the Tests of General Educational Development (GED) was undertaken. People take the GED tests in order, by achieving passing scores, to be awarded high school equivalency degrees. The review of GED statistics indicated tat there was a sharp upturn in numbers of young people taking the GED tests in Texas in the mid-1990s. This finding helps to explain why the TEA statistics on dropouts are misleading. According to TEA accounting procedures, if students leave regular high school programs to go into state-approved GED preparation programs, they are not counted as dropouts.

If we put aside the TEA-reported dropout rates as misleading, differences in other sources of evidence on rates of high school completion in Texas appear reconcilable. NCES reports (based on CPS surveys) indicate that the rate of high school completion

among young people in Texas in the 1990s was about 80%. This would imply a non-completion (or dropout) rate of 20%. Initially this would appear markedly lower than the non-graduation rate of at least 30% derived from my analyses of TEA data on enrollments and graduates. But the CPS surveys count as high school completers, those who receive a regular high school diploma and those who receive a GED high school equivalency degree. So it seems clear that a convergence of evidence indicates that during the 1990s, slightly less than 70% of students in Texas actually graduated from high school (e.g. 1.5 million/2.2 million = 0.68). This implies that about 1 in 3 students in Texas in the 1990s dropped out of school and did not graduate from high school. (Some of these dropouts may have received GED equivalency degrees, but GED certification is by no means equivalent to regular high school graduation).

In addition to studying enrollment data for Texas, I also examined patterns of retention in grade 9 and high school completion rates among states for which such data are available. Results indicated that there is a strong association between high rates of grade 9 retention and low rates of high school completion. Specifically, results suggested that for every 10 students retained to repeat grade 9, about seven will not complete high school (see Haney, 2000, section 7.2).

The applicability of these results, from across 18 states, to Texas may well be questioned. Fortunately, I have recently received summary of longitudinal results from Texas that show more clearly what happens to students who fail grade 9 and have to repeat that grade. According to a study released by Texas State Senator Gonzalos Barrientos, in 1992-93 41,344 freshmen high school students were retained in the ninth grade in all Texas districts. By 1997-98, 8063 or19.5% of them had graduated from high

school and another 6,445 or 15.6% had received GED high school "equivalency" diplomas (Where have all the freshmen gone, 1999). These results indicate that prospects for students flunking grade 9 in Texas are slightly worse than estimated in the Myth article. Specifically, they suggest that for students who are failed in grade 9, only about one in five will persist in high school until graduation.

3.3 What Happens to Texas High School Graduates

I am of the view that an educational system in which 30% of students overall (and 40% of minorities) do not even complete high school is one to be deplored rather than applauded. But clearly people's values in making such judgements differ. Some may feel, for example, that having 30% of young people fail to graduate from high school is an unfortunate, but necessary, price to pay for boosting the achievement of those who do finish high school. As one ex-college president in Massachusetts commented recently, in education as in sports, "no pain, no gain."

Hence it is useful to examine what happens to students who do complete high school in Texas. In doing so, we are in effect addressing the question of whether the huge social cost of having 3 out of 10 young people not even complete high school might possibly be warranted by improvements in learning for the 7 out of 10 who do.

In section 7.5 of the Myth article, I summarized the results of the "college readiness" testing program in Texas from 1989-90 through 1997. This test is called the Texas Academic Skills Program or TASP test. This test is intended to assess whether students have "the reading, writing and math skills necessary to do college level work." Curiously, the Texas Higher Education Coordinating Board, the Texas agency under whose auspices the TASP has been developed and administered has posted TASP results

on its web site (www.thecb.state.tx.us) only through 1994-95. However, thanks to the generous help of Chris Patterson of the Lone Star Foundation (personal communication, March 22, 2000) and Richard Hamner of the Office of Texas State Senator Gonzalos Barrientos (personal communication, October 24, 2000) I have been able to obtain TASP results for the high school classes of 1993 through 1998, disaggregated by ethnicity. These results are shown in Figure 4.1.

[Insert Figure 4.1 here]

These results indicate that the "college readiness" of Texas students in the high school classes of 1993 through 1998 has fallen precipitously, at least as measured by the TASP reading, writing and math tests. For the members of the high school class of 1998, who sought to attend college in Texas and hence had to take the TASP tests, only 31.8% of students overall (and just 17.6% of Black and 23.2% of Hispanic students) passed all three tests. These were students who would have taken the TAAS in 1996 when they were in grade 10. According to the TEA (www.tea.state.tx.us/student.assessment/results/summary/sum96/gxen96.htm, 10,17/2000) 208,858 students took the exit level TAAS in March 1996 and 124,489 passed. According to Texas Higher Education Coordinating Board statistics, 81,159 members of the high school class of 1998, all of whom presumably passed the TAAS since they graduated from high school, took the TASP tests just two years later, but 55,350 of them failed. As noted in the Myth article (Haney, 2000, section 7.5), "reviewing these results from the TASP testing, and comparing them with results of TAAS testing, the conclusion seems inescapable that something is seriously amiss in the

Texas system of education, the TAAS testing program, or the TASP testing program – or perhaps all three."

The ill-health of higher education in Texas is apparent not just in TASP results, and in my view, but also according to other measures and other observers. According to a report prepared by the University of Texas System, *Presentation to the Education Subcommittee of the House Appropriations Committee*, dated February 10, 1999:

> Among Anglos, as well as Hispanics and African-Americans, there are marked declines in the number of students who are prepared academically for higher education, as measured by their scores on the SAT and their rank in high school class. . . . . It is worth emphasizing, therefore, that this is not merely a "minority problem," as is sometimes assumed. The decline in the number of Anglos in the educational system is almost as steep as the decline among Hispanics and African-Americans. (University of Texas System, 1999, p. 46)

The report proceeded to discuss a series of three graphs illustrating the problems in the educational "pipeline" supplying the higher education enterprise in Texas. Rather than trying to reproduce these graphs, I have pulled data from them together in a single table, Table 4.1 below.

Table 4.1: College Applicant Pool in Texas, 1996-1997

	Hispanic	African-American	Anglo	Total
18-year-olds	93,145	39,071	156,180	288,396
HS Graduates	54,167	22,844	98,899	175,910
% of 18-year-olds	58.2%	58.5%	63.3%	61.0%
SAT takers	13,529	7,427	41,373	62,329
% of 18-year-olds	14.5%	19.0%	26.5%	21.6%
SAT score >900 and in top 40% of HS class	5,870	2,226	27,706	35,802
% of 18-year-olds	6.3%	5.7%	17.7%	12.4%
SAT score >900 and in top 20% of HS class	3,884	1,356	18,849	24,089
% of 18-year-olds	4.2%	3.5%	12.1%	8.4%

Source: University of Texas System, Presentation to the Education Subcommittee of the House Appropriations Committee, February 10, 1999, p. 45.

The report does not document the source for its figures on the numbers of 18-year-olds in Texas in 1996-97, but if they are correct, they indicate that the high school graduation rates in Texas may be even worse than estimates derived from my analyses of enrollment data (and specifically proportions of grade 6 students graduating from high school 6 .5 years later.) The data in the University of Texas System report indicate that the high school graduation rate was only 63.3% for White students and less than 60% for Black and Hispanic students. Also, it might be mentioned that 18-year-olds in 1997 would have spent their entire middle- and high-school careers in Texas schools after the TAAS-driven educational reforms were begun in 1990-91.

Rather than commenting further myself on the data shown in Table 4.1, let me simply quote what the University of Texas System report said:

> An examination of these graphs yields the inescapable conclusion that Texas is failing to develop the potential of large segments of its population. . . . It is clear from these graphs that Texas is failing to develop a significant portion of its "human capital" among its Anglo, Hispanic and African-American young people. The loss of so many students from the educational "pipeline" that supplies the Texas higher education enterprise underscores the critical need for enhanced investment in the State's public schools, as well as higher education, if Texans of the 21st century are to be prepared for the challenges of a new era.
>
> The losses from the educational "pipeline" among Hispanic and African-Americans must be of particular concern to Texans because they have a dramatic impact on minority enrollment in higher education, especially at the more competitive and selective institutions. At U. T. Austin for example, the average SAT score for first-time freshmen in fall 1998 is 1228, far above the 900 level selected to illustrate the "pipeline" problem. Also, approximately 46% of U. T. Austin first-time freshmen in fall 1998 were in the top 10% of their high school class. (University of Texas System, 1999, p. 46)

More recently, the National Center for Public Policy and Higher Education. (2000) released *Measuring Up: The State-by-State Report Card for Higher Education*.

This study was an attempt to evaluate the status of higher education in the states and to rate each state in terms of student preparation ("How well are students prepared to take advantage of college?"), participation (Do state residents enroll in college level programs?"), affordability ("How affordable is higher education in each state?"), completion (Do those who enroll complete their academic and vocational programs?") and benefits ("What economic and civic benefits does each state receive from the education of its residents?"). Without going into details (they are available at http://measuringup2000.higher education.org) on how ratings were made in each of these categories, let me mention simply that Texas received relatively low marks in each category: a C in preparation, a D in participation, a C in affordability, a D+ in completion and a C in benefits.

Surely there are a variety of ways of judging the success of systems of elementary-secondary education. One of them is how well students are prepared for higher education and successfully complete their academic and vocational programs. All indicators I have been able to locate(TASP "college readiness" test results, testimony by University of Texas officials and the recent *Measuring Up* report on higher education in the states) suggest that by these measures, the Texas system of pre-collegiate education had not been terribly successful. In short, I have been able to find no evidence at all that the huge social cost of having 3 out of 10 students in Texas during the 1990s fail even to graduate from high school might be justified by improvements in the learning and academic preparation of those who do.

IV Conclusions

The preceding section of this paper, discussing what happens to students who do graduate from high school in Texas, may seem somewhat removed from the focus of this conference, namely how to get accurate estimates of the extent of the dropout problem in the United States and how to prevent students from leaving school before graduation. Hence, in conclusion let me explain why the myth of the Texas miracle in education, and some of the ways I have sought to study what has been happening to students in the Lone Star state, are relevant to research on dropouts and dropout prevention elsewhere.

4.1 Lessons from the Myth of the Texas Miracle

Elsewhere I have described what I see as some of the broader lessons of the Texas myth story, concerning for example notions of accountability, and the hazards of high stakes testing (see Haney, 2000, section 8.3). Here I try to sum up what I view as lessons from the Texas story for research on dropouts and dropout prevention. First, I observe simply that the Texas myth story surely should remind us of the broader aims of education in our society. The dramatic gains apparent on TAAS in the 1990s are simply not born out by results of other testing programs (such as the SAT, NAEP and TASP). So the Texas story is a sad reminder of what we have seen again and again, namely that when enough pressure is brought to bear on schools, test scores can be increased. Yet such increases frequently come at large cost, to the broader learning of students, to the meaningfulness of test results themselves (see for example, Cannel, 1987, 1989; Linn, Graue and Sandes, 1989; Koretz, Linn, Dunbar & Shepard, 1991; Koretz & Barron, 1998) and to the longer term educational welfare of students who do persist in school to graduate from high school. The deterioration of the academic preparation of college

bound youth in Texas during the 1990s tells us that the costs of ill-conceived test-based accountability schemes fall not just on students who "fail" in such a system but also those who in the short term seem to have succeeded. But perhaps the Texas story tells us most clearly is that quite apart from raising test scores, surely one of the main outcomes of pre-collegiate education is the proportion of students who finish and graduate from high school. By this measure, surely the Texas system of education in which only two out of three young people in the 1990s actually graduated from high school should not be deemed a success, much less a miracle.

4.2 Be Wary of Official Dropout Statistics

One very practical lesson from the Texas Myth story is that researchers and policy analysts should be very wary of officially reported dropout statistics. This is not just because of the long recognized problem that different states define dropouts differently, for instance with regard to the calendar year over which dropouts are reported. Winglee, at al. (2000) provides a summary of such problems and summarizes efforts to derive consistent data on dropouts across the states as part of the Common Core of Data (CCD).

Texas, ironically enough, is one of the states which since 1996 has been largely in conformance with the CCD definition of dropouts (see Winglee, at al., 2000 pp. 10-11). But what clearly seems to have happened is that since the TEA started in the early 1990s to use dropout rates as one of the key variables in rating districts, districts have, shall we say, apparently been reporting dropouts in a manner different than they were using before dropout statistics were used in making in accountability ratings. What this suggests is that researchers need to pay attention to the policy contexts in which data are gathered, and realize that when data start to be used to make prominent decisions, such as public

ratings of schools and districts, the manner in whch data are collected and reported may well be affected.

4.3 Distinguish GED diplomas from normal high school graduation

Another important lesson from the Texas Myth story is that researchers and policy-makers should distinguish regular high school graduation from alternative high school "completion," such as via passing the GED tests and receiving a GED high school equivalency diploma. The reason for this is that recent research (Cameron & Heckman, 1993; Murnane, Willet & Tyler, 2000) has shown that receipt of the GED diploma is not really equivalent to high school graduation in terms of either employment opportunities or likelihood for post-secondary education.

4.4 Examine grade progression and graduation rates

Another general recommendation flowing from the Texas Myth story is that researchers and policy-makers ought to study rates of progress of students through the grades and from key transition grades, such as 6, 8 and 9 to high school graduation. I trust that the summary of the Texas Myth story above provides an example of why such approaches can be valuable.

But to provide another example, I have examined relevant data from two recent NCES reports of selected statistics on the nation's 100 largest school districts (Young, 1998, 2000). Specifically, I examined data on the number of high school graduates in 1997-98 and compared these figures with the with numbers of students enrolled in grades 7 to 9 in 19994-95. Thereby one can calculate high school "graduation rates" for each of these districts, as the number of graduates in 1997-98 divided by one third of the grade 7

to 9 enrollment in 1994-95. Results are shown in Table 5.1, with districts sorted in ascending order from lowest the highest graduation rate.

[Insert Table 5.1 here]

As can be seen in Table 5.1, five Texas districts are among the two dozen worst in the nation according to this measure of graduation rate. Among the fourteen largest districts in Texas, the Houston Independent School District has the worst graduation rate, 46.7%, with over 45,000 enrolled in grades 7 to 9 in 1994-95, but only 7,400 graduating from high school in 1997-98. The Dallas graduation rate, 49.5% is almost as bad, and Austin, Aldine and San Antonio all have graduation rates of about 54-55%. The Aldine district, by the way, was one of the four studies by Skrla, Scheurich & Johnson (2000) and which they described as having produced "equitable educational success for literally all the children in their districts" (Skrla, Scheurich & Johnson, 2000, p. 39.)

Note too that there appear to be some large districts with graduation rates far worse than large districts in Texas. Incredibly, both Cincinnati and Cleveland show graduation rates of only 26%. Indeed three out of the five worst districts nationwide, all showing graduation rates below 45% are in Ohio.

On the brighter side, there are several large school districts – Fairfax County, VA, Montgomery County, MD, and Pasco County, FL – with graduation rates of 90%. And among the 14 largest districts in Texas, five show graduation rates between 73% and 78% (Fort Bend, North East, Cyprus-Fairbanks, Ysleta and Northside independent school districts). These districts are a very long distance from reaching the national goal of having 90% of students complete high school, but they are doing considerably better than districts such as Houston and Dallas.

4.5 What can be done to help more students graduate from high school?

In closing, let me comment briefly on what might best be done to help more students graduate from high school. I would like to suggest two things; namely, to stop misusing test results, and to find better ways of helping low achieving students besides flunking them and forcing them to repeat the ninth grade.

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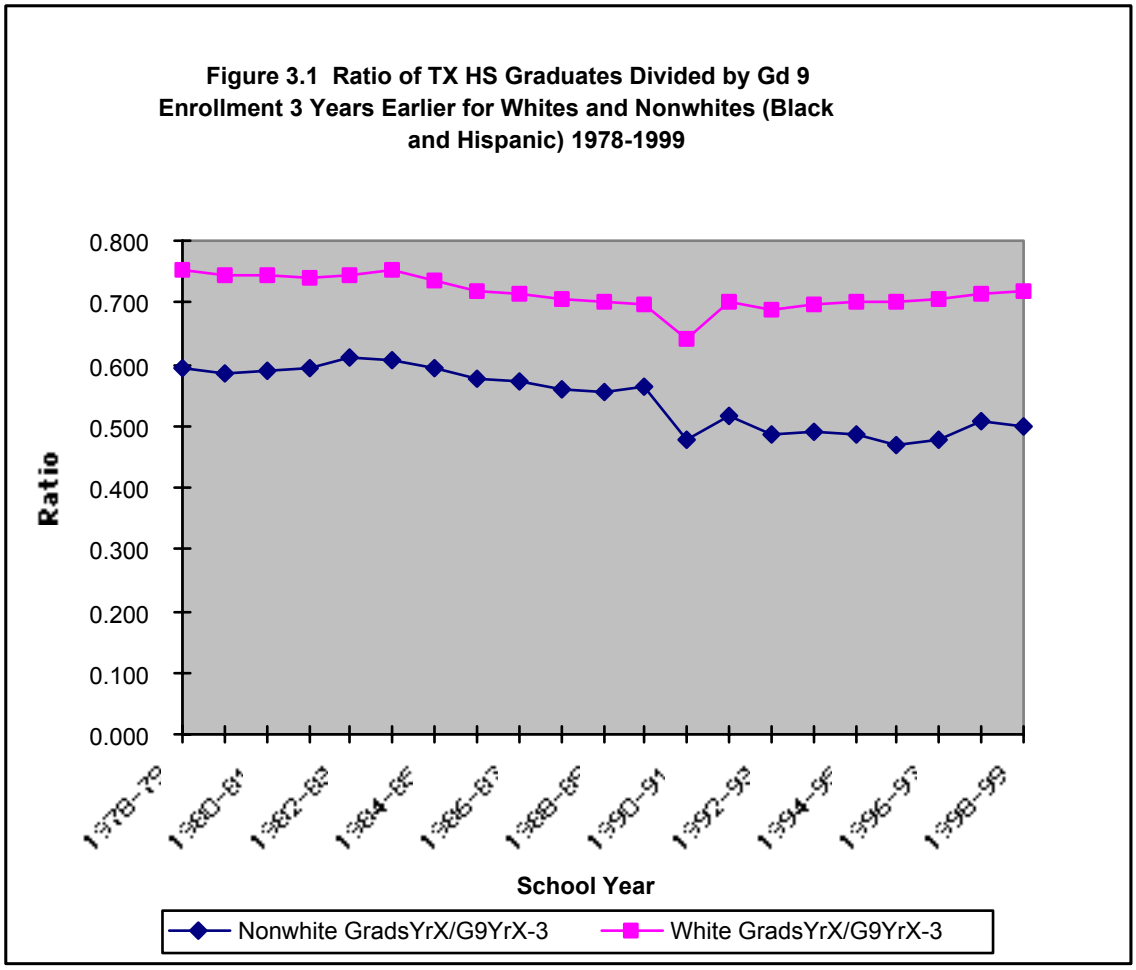


Figure 3.1 Ratio of TX HS Graduates Divided by Gd 9 Enrollment 3 Years Earlier for Whites and Nonwhites (Black and Hispanic) 1978-1999
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Ratio
School Year
Nonwhite GradsYrX/G9YrX-3
White GradsYrX/G9YrX-3

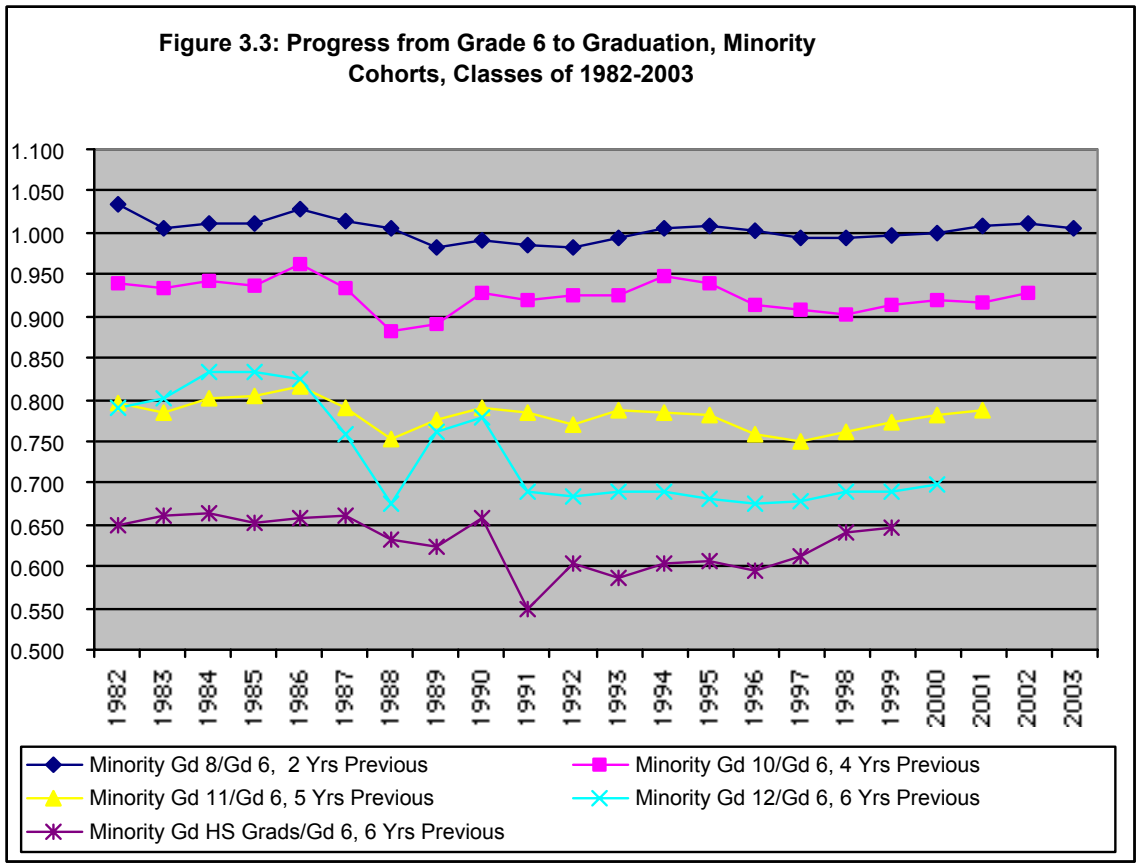


Figure 3.3: Progress from Grade 6 to Graduation, Minority Cohorts, Classes of 1982-2003
1.100
1.050
1.000
0.950
0.900
0.850
0.800
0.750
0.700
0.650
0.600
0.550
0.500
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
Minority Gd 8/Gd 6, 2 Yrs Previous
Minority Gd 10/Gd 6, 4 Yrs Previous
Minority Gd 11/Gd 6, 5 Yrs Previous
Minority Gd 12/Gd 6, 6 Yrs Previous
Minority Gd HS Grads/Gd 6, 6 Yrs Previous

Table 5.1 High school graduates 1997-98 as percentage of average enrollment grades 7 to 9 1994-95 in the 100 largest school districts

	Name of reporting district	State	Total no. of students 1998–1999 [2]	Enrollment1998-1999 by Grade range				Enrollment 1994-95	Number of 1997–1998 graduates	Grads 97-98 as % of (Gds 7-9 enroll. 94-95/3)
				PK to 6	7 to 9	10 to 12	Ungraded	Grades 7 to 9		
	Total		**10,866,556**	**6,235,873**	**2,498,212**	**1,907,191**	**225,280**		**479,632**	
1	Cincinnati City School District	OH	49,215	30,995	11,536	6,541	143	12,520	1,096	26.26%
2	Cleveland City School District	OH	75,386	46,969	18,508	9,792	117	17,859	1,581	26.56%
3	Oakland Unified	CA	54,256	35,043	11,276	7,917	20	11,581	1,633	42.30%
4	Atlanta City School District	GA	60,541	38,269	13,266	9,006	—	14,584	2,087	42.93%
5	Columbus City School District	OH	64,612	39,377	14,784	10,231	220	15,285	2,207	43.32%
6	Milwaukee School District	WI	99,814	62,555	22,612	14,647	—	21,949	3,247	44.38%
7	Baltimore City Public School System	MD	106,540	64,678	25,180	16,682	—	27,593	4,103	44.61%
8	Houston Independent School District	TX	210,179	133,581	45,888	30,710	—	47,598	7,421	46.77%
9	San Bernardino City Unified	CA	48,907	29,541	11,666	7,427	273	11,133	1,778	47.91%
10	New York City Public Schools	NY	1,071,073	571,492	243,916	171,082	84,583	229,507	37,851	49.48%
11	Dallas Independent School District	TX	159,908	100,917	37,405	21,586	—	34,302	5,659	49.49%
12	Pinellas County School District	FL	110,582	62,044	27,659	20,879	—	28,460	4,744	50.01%
13	Fort Worth Independent School District	TX	77,956	47,469	17,664	12,823	—	16,623	2,834	51.15%
14	Duval County School District	FL	127,411	76,529	31,204	19,678	—	27,385	4,703	51.52%
15	Detroit City School District	MI	179,102	108,192	35,879	22,725	12,306	37,566	6,573	52.49%
16	Santa Ana Unified	CA	56,071	35,691	11,499	8,706	175	10,697	1,891	53.03%
17	Fresno Unified	CA	78,942	46,264	19,649	13,011	18	17,960	3,180	53.12%
18	Austin Independent School District	TX	79,496	47,954	18,529	13,013	—	16,985	3,042	53.73%
19	Jefferson Parish School Board	LA	53,615	30,894	12,835	9,750	136	13,789	2,482	54.00%
20	Aldine Independent School District	TX	49,453	30,423	11,560	7,470	—	11,028	1,986	54.03%
21	San Antonio Independent School District	TX	59,080	35,524	13,998	9,558	—	13,992	2,528	54.20%
22	Hillsborough County School District	FL	156,452	92,622	39,098	24,732	—	35,328	6,393	54.29%
23	Philadelphia City School District	PA	207,465	113,875	47,170	36,108	10,312	49,172	8,991	54.85%
24	Buffalo City School District	NY	47,096	26,643	9,915	7,019	3,519	9,730	1,797	55.41%
25	Minneapolis	MN	49,229	30,054	10,851	8,324	—	9,799	1,810	55.41%
26	City of Chicago School District 29	IL	430,914	276,612	92,969	61,333	—	89,499	16,567	55.53%
27	Orleans Parish School Board	LA	82,176	48,364	18,732	15,080	—	19,757	3,676	55.82%
28	Caddo Parish School Board	LA	47,089	26,252	11,810	9,027	—	12,844	2,417	56.45%
29	Los Angeles Unified	CA	695,885	409,202	148,015	111,781	26,887	136,134	25,843	56.95%
30	District of Columbia Public Schools	DC	71,889	45,634	13,027	9,545	3,683	15,198	2,905	57.34%
31	Dade County School District	FL	352,317	202,757	86,362	63,198	—	73,829	14,401	58.52%
32	Polk County School District	FL	77,300	44,557	19,511	13,232	—	17,564	3,430	58.59%
33	Denver County	CO	68,790	42,989	14,880	10,921	—	13,430	2,627	58.68%
34	Tucson Unified District	AZ	62,670	36,602	14,505	11,537	26	14,489	2,843	58.87%
35	Sacramento City Unified	CA	51,378	30,206	11,801	9,371	—	10,982	2,162	59.06%
36	Garland Independent School District	TX	47,967	27,859	11,434	8,674	—	10,006	1,973	59.15%
37	Palm Beach County School District	FL	146,568	83,227	36,633	26,708	—	30,927	6,112	59.29%
38	Wichita	KS	47,157	27,160	10,884	8,905	208	10,727	2,137	59.77%
39	Puerto Rico Dept of Education	PR	613,862	344,020	141,144	113,719	14,979	149,907	29,891	59.82%
40	East Baton Rouge Parish School Board	LA	56,527	30,429	13,304	10,639	2,155	14,169	2,858	60.51%
41	Portland School District 1J	OR	54,546	29,729	12,361	11,229	1,227	11,906	2,427	61.15%
42	Volusia County School District	FL	59,851	33,429	15,329	11,093	—	13,578	2,769	61.18%
43	San Diego City Unified	CA	138,433	81,851	30,449	24,323	1,810	28,116	5,928	63.25%
44	Mobile County School District	AL	65,209	36,999	15,761	12,449	—	16,348	3,451	63.33%
45	Brevard County School District	FL	68,681	38,832	17,044	12,805	—	15,419	3,259	63.41%
46	Orange County School District	FL	138,860	79,562	34,928	24,370	—	27,516	5,840	63.67%
47	De Kalb County School District	GA	93,171	54,273	22,208	16,690	—	20,601	4,374	63.70%
48	Broward County School District	FL	231,187	134,335	54,928	41,924	—	45,143	9,637	64.04%
49	El Paso Independent School District	TX	62,945	35,857	15,676	11,412	—	15,833	3,387	64.18%
50	Anchorage School District	AK	49,587	28,256	11,418	9,913	—	10,630	2,296	64.80%
51	Memphis City School District	TN	111,691	66,342	24,692	17,952	2,705	26,084	5,736	65.97%
52	Escambia County School District	FL	45,667	26,175	11,197	8,295	—	10,083	2,229	66.32%
53	Cumberland County Schools	NC	51,297	29,457	12,416	9,424	—	10,665	2,367	66.58%
54	Albuquerque Public Schools	NM	85,847	48,143	20,827	16,877	—	21,494	4,771	66.59%
55	Seminole County School District	FL	58,156	32,199	14,525	11,432	—	13,251	2,950	66.79%
56	Charlotte—Mecklenburg Schools	NC	98,758	58,059	23,392	17,307	—	19,254	4,298	66.97%
57	Lee County School District	FL	54,779	32,022	12,925	9,832	—	11,881	2,671	67.44%
58	Guilford County Schools	NC	61,154	35,580	14,532	11,042	—	13,039	2,934	67.51%
59	Shelby County School District	TN	48,194	26,109	11,555	9,960	570	10,508	2,385	68.09%
60	Arlington Independent School District	TX	55,709	32,850	13,511	9,348	—	11,437	2,607	68.38%
61	Virginia Beach City Public Schools	VA	77,442	41,937	18,991	15,272	1,242	18,173	4,151	68.52%
62	Greenville County School District	SC	57,884	32,346	14,539	10,999	—	13,453	3,110	69.35%
63	Clark County School District	NV	203,777	121,043	45,268	36,904	562	35,259	8,165	69.47%
64	Knox County School District	TN	51,666	28,891	11,823	10,952	—	11,998	2,781	69.54%
65	Anne Arundel County Public Schools	MD	74,079	41,183	17,892	14,607	397	16,921	3,943	69.91%
66	Long Beach Unified	CA	89,214	51,523	19,237	16,507	1,947	16,685	3,916	70.41%
67	Nashville—Davidson County SD	TN	67,016	39,087	14,943	10,549	2,437	16,909	4,004	71.04%
68	Fulton County School District	GA	65,642	38,217	14,319	13,106	—	12,009	2,844	71.05%

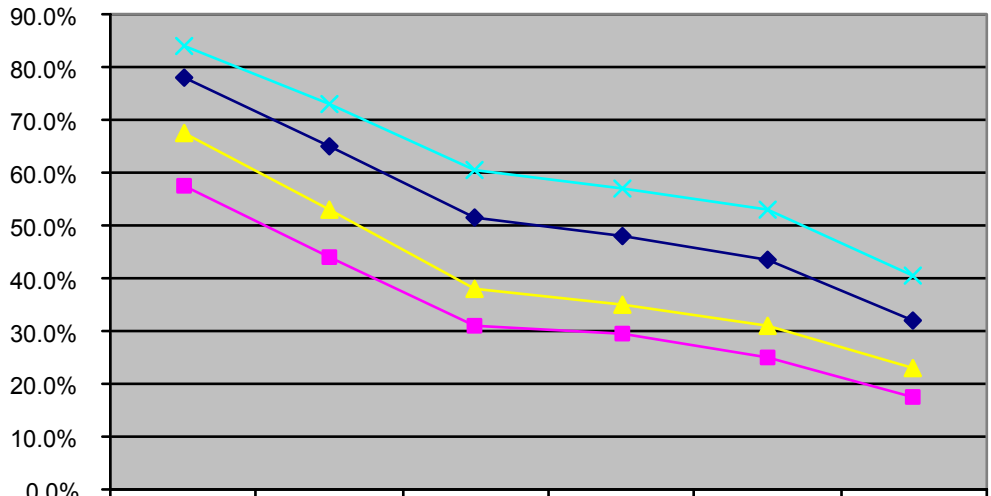
69	Washoe County School District	NV	52,813	30,483	12,005	10,223	102	9,983	2,391	71.85%
70	Mesa Unified School District	AZ	71,284	40,955	16,092	14,218	19	14,985	3,592	71.91%
71	Hawaii Department of Education	HI	188,069	107,682	43,074	37,213	100	43,021	10,369	72.31%
72	Jefferson (CO) County R—1	CO	88,654	47,970	21,945	18,694	45	20,171	4,879	72.56%
73	Fort Bend Independent School District	TX	50,890	26,987	13,235	10,668	—	11,171	2,722	73.10%
74	North East Independent School District	TX	47,732	26,538	11,707	9,487	—	10,746	2,631	73.45%
75	Boston School District	MA	61,291	35,424	13,971	11,896	—	13,122	3,246	74.21%
76	Cypress—Fairbanks ISD	TX	58,044	32,784	13,978	11,282	—	11,595	2,883	74.59%
77	Granite School District	UT	73,474	38,688	16,554	16,969	1,263	19,153	4,801	75.20%
78	Seattle	WA	48,280	28,075	10,087	10,118	—	9,716	2,445	75.49%
79	Jefferson (KY) County	KY	99,037	28,057	23,024	19,954	28,002	20,171	5,080	75.55%
80	Cobb County School District	GA	91,208	51,042	21,497	18,669	—	18,997	4,796	75.74%
81	Garden Grove Unified	CA	46,916	27,539	10,009	9,287	81	9,387	2,373	75.84%
82	Ysleta Independent School District	TX	47,238	25,721	10,948	10,569	—	11,300	2,860	75.93%
83	Gwinnett County School District	GA	98,784	56,357	24,048	18,379	—	18,847	4,775	76.01%
84	Wake County Schools	NC	92,256	54,310	21,546	16,400	—	17,220	4,388	76.45%
85	San Juan Unified	CA	47,799	25,473	11,238	11,079	9	11,124	2,875	77.54%
86	Northside Independent School District	TX	61,308	34,218	15,224	11,866	—	13,693	3,549	77.76%
87	San Francisco Unified	CA	61,042	33,605	13,927	13,488	22	14,133	3,708	78.71%
88	Prince William County Public School	VA	51,111	28,024	11,630	9,874	1,583	10,678	2,822	79.28%
89	Alpine School District	UT	45,208	23,840	9,645	10,602	1,121	10,787	2,863	79.62%
90	Baltimore County Public Schools	MD	105,914	60,178	24,464	20,922	350	22,309	5,984	80.47%
91	Prince Georges County Public Schools	MD	130,259	72,665	28,270	24,959	4,365	27,043	7,287	80.84%
92	Chesterfield County Public Schools	VA	50,621	27,928	12,252	10,206	235	11,322	3,110	82.41%
93	Jordan School District	UT	73,286	37,555	16,585	17,039	2,107	17,018	4,742	83.59%
94	Davis School District	UT	59,285	30,408	13,285	14,382	1,210	14,060	4,177	89.13%
95	Fairfax County Public Schools	VA	149,029	76,451	32,345	31,581	8,652	30,452	9,087	89.52%
96	Montgomery County Public Schools	MD	127,933	72,626	29,316	25,539	452	24,505	7,413	90.75%
97	Pasco County School District	FL	46,065	26,237	11,022	8,806	—		1,815	
98	St. Louis City	MO	45,947	28,560	9,108	5,374	2,905		1,171	
99	St. Paul	MN	45,349	26,016	9,913	9,420	—		1,870	
100	Omaha Public Schools	NE	45,118	25,726	11,024	8,368	—		2,239	

[2] Students distribution by type of school is based on membership in the schools of the school district. This count may differ somewhat from the count of students receiving educational services from the school district reported in table 1, it may also differ from the count of students on table 3 because table 5 is based on reported students by grade and table 3 is based on reported total student count.

min	26.26%
max	90.75%
mean	63.83%
median	64.11%

SOURCE: Young 1998; 2000

Figure 4.1 TASP College Readiness Pass Rates 1993 - 1998 Graduating Classes



	1993	1994	1995	1996	1997	1998
All groups	78.0%	65.2%	51.7%	48.1%	43.3%	31.8%
Black	57.7%	44.2%	31.2%	29.7%	24.9%	17.6%
Hispanic	67.6%	52.9%	37.9%	34.8%	30.9%	23.2%
White	84.2%	73.1%	60.3%	57.0%	53.0%	40.5%