Diversity by Design or Default?
Minority Students and the Texas Top 10% Law

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Introduction

In a climate of growing opposition to the use of race preferences in college admissions, administrators have sought to devise strategies to diversify their campuses while complying with the protections of the Fourteenth Amendment. When Texas race-sensitive admission criteria were judicially banned in Texas, the State legislature passed House Bill 588—popularly known as the top 10% law—which guaranteed automatic admission to any public university to high school students who graduated in the top decile of their class. Building on extensive empirical evidence that high school grades are strong predictors of college success (Bowen & Bok, 1998) and the philosophical principle of equal educational opportunity (Coleman, 1990; Jencks, 1988), the architects of the uniform admissions bill sought to maintain the hard won ethno-racial diversity at the public flagship universities. Its appeal rested on its focus on merit and its uniform application across high schools throughout the state. It was lauded as a race-neutral measure on the assumption that *any* student could study hard enough to graduate in the top decile of his or her high school class.

Early results indicated that the law had some capacity to restore ethno-racial diversity at the State's public flagships (Walker & Lavergne, 2001; Tienda, et al., 2003; UT Office of Public Affairs, 2003). One recent paper evaluating enrollment decisions of top 10% graduates show uniform responsiveness to college selectivity according to type of high school attended and across race and ethnic groups (Niu, Tienda & Cortes, 2005). Another study finds that, after taking into account the minority composition of students' high schools, top decile black and Hispanic students are as likely as whites to enroll at selective institutions, including Texas flagships (Tienda & Niu, 2004). In large measure these trivial college enrollment differentials among top decile graduates reflect a series of contingent, nested decisions that constrain the final "choice." In fact, far more substantial numbers of students qualify for automatic admission than actually apply, particularly those from resource-poor high schools with low college-going traditions and members of underrepresented groups. Because graduates from resource-poor schools and members of underrepresented minorities who do enroll at a four-year college are a highly selective sub-sample of all potentially qualifying students from these pools, the equal enrollment outcomes among top 10% students result from the selection regime governing application decisions.

However, under the Texas Top 10% law, two critical selections occur even before college applications. The first selection is based on qualifying for the admission guarantee, namely achieving an average grade point that ranks in the top 10% of the class. The contours of racial and ethnic segregation in many Texas high schools implies that a substantial number of Hispanic students and a smaller number of African-American students are virtually guaranteed to qualify for the admission guarantee, especially those attending public schools in the Rio Grande Valley and inner-city Dallas and Houston high schools. However, a more meaningful question is whether underrepresented

minorities are equally, if not more likely, to graduate in top 10% of their class if they attend segregated schools. Another selection occurs because qualified students may not know about the law. Although it is not necessary to know about the law to be qualified for its provisions, presumably knowledge of the law will increase the likelihood of application to a competitive, public four-year university.

Therefore, in this paper, we examine the selection regime that undergirds the enrollment decision, focusing on who achieves top 10% class rank status and the extent of knowledge about the law among students who qualify for its provisions. Specifically we ask three questions: First, how likely are under-represented minorities to graduate in the top 10% of their class, and how does this differ according to the ethno-racial composition of their high schools? Second, how likely are top 10% students from under-represented minority groups to "know a lot" about the law? And how does this differ by top 10% students' college plan and enrollment outcomes? Third, how have under-represented minorities responded to the law? Have they worked harder to improve their class rank? Have they competed for good grades? Answers to these questions, particularly the first, are important both to gauge the effect of the Texas Top 10% law, and to glean further understanding of race and ethnic differences in college enrollment.

The next section describes Texas Higher Education Opportunity (THEOP) data, defines core variables and outlines the analytic strategy. Subsequently we present results of probit models predicting top 10% rank and the likelihood of knowing about the law. The concluding section discusses the implications of the results for evaluating the success of the top 10% admissions policy.

Data and Method

The analyses are based on the senior cohort of the Texas Higher Education Opportunity Project (THEOP) data, a longitudinal study of Texas public high school students who were first surveyed during spring of 2002 using a paper and pencil in-class survey instrument (N=13,803). For cost reasons, the longitudinal sample is based on a random subsample of the baseline respondents (N=5,836) who were re-interviewed by phone one year following high school graduation. To guarantee the maximum possible precision for blacks and Asians, all baseline respondents from these groups were included in the longitudinal sample; proportionate samples of Hispanics and non-Hispanic whites were randomly drawn for the sample balance. The response rate for the wave 2 interviews was 70 percent, and sample weights for the follow-up interviews were recalibrated to the original population. In addition to basic demographic, socioeconomic and standard tracking information, the baseline survey obtained information about future plans, including up to five ranked college preferences, applications and admission decisions as well as knowledge and perceptions of college admissions, including their knowledge and opinion of the Texas Top 10% Law. The first follow-up survey (wave 2) recorded whether respondents actually enrolled in college one year after high school graduation, and if so, where.

Covariates
Class rank

The THEOP survey includes self-reported class rank, measured in deciles, and students' race/ethnicity. Class rank is either known to students or estimated by students when unknown. That rank can be based either during spring semester of the junior year or fall or spring of the senior year, depending on the semester in which students applied and were admitted, partly explains why almost 20 percent of the college choice sample is ranked as top decile graduates.

Knowledge of the top 10% law

Students were asked "how much have you heard about the Top 10% Rule (guaranteeing automatic admission to the top 10% of a high school class to Texas public colleges and universities)?"

School segregation strata

To portray how school segregation influences the likelihood that students will qualify for automatic admission, we use a school-level measure of minority composition. The minority composition of high schools in the THEOP survey was derived from administrative data posted by the Texas Education Agency and appended to individual records. Students were sorted into five strata based on the ethno-racial composition of their high schools, using the percent white as a baseline referent. These are

- predominantly white (more than 80% white);
- majority white (60-80% white);
- integrated (40-60% white);
- majority minority (20-40% white);
- predominantly minority (less than 20% white).

Analysis strategy

A probit model is well suited to estimate students' likelihood of ranking top 10% and knowing "a lot" about the law. Baseline model estimate how likely minorities are to rank top 10%. We estimate the model for all students and separate by school segregation strata. The separate logit model estimates takes into account that the ranking is calculated at each high school, students are competing only with their own classmates. Because black and Hispanic students are more likely to come from low SES family, we add family SES to the baseline model to test whether black and Hispanic students' low likelihood of ranking top 10% is due to low SES.

Results

Table1: Race/Ethnicity distribution by school segregation strata

Table2: Probit Coeff. : Top 10% status

Major finding 1: Blacks and Hispanics are less likely to make it top 10%, even at minority schools, and even after controlling for family SES

Table 3: Knowledge of the law by class rank

Table 4: Probit coeff.: "Know a lot about the law," top10%

       Major finding 2.1: Black and Hispanic students are more likely to know none about the law. This holds for top 10% blacks and Hispanics, second deile and below Hispanic students.

       Major finding 2.2: Hispanic top 10% students are less likely to "know a lot about the law," due to low family SES. Hispanic top 10% students from predominately minority schools are particularly disadvantaged – they are less likely to "know a lot about the law" even after controlling for SES. This holds among top 10% seniors who stated a 4-year institution as the 1st preference.

Table 5: Knowledge about the law among top 10% by enrollment status

Remark: the major difference by race/ethnicity is that blacks and Hispanics are much less likely to enroll (and to enroll selective institutions).

       Major finding 2.3: Among top 10% non-enrollees, more than half of blacks and one-third of Hispanics know nothing about the law.

Table 6: Improving rank & competing for good grades

       Major findings 3: White top 10% students tend to perceive that the law has increased competition for good grades. Among second decile, third decile and below seniors, blacks and Hispanics are more likely to respond to the law by working harder to improve their class rank.

Conclusion

       The most important, and striking, finding is that, even at minority schools, Blacks and Hispanics are less likely to make it top 10%, and it is so even after controlling for family SES.
       Since the decision and the implementation of the 10 percent plan, several important changes and outreach efforts have occurred at the state level:
- development and use of a common state-wide college application for all public universities;
- distribution of a letter to all high school seniors signed by Governor Bush informing them of their eligibility for admission to any state college or university and urging them to apply to the institution of their choice;
- preparation and broad distribution of memoranda to high school counselors explaining the meaning of eligibility and the additional requirements for college admission;
- Implementation of multi-faceted outreach activities to forge links between selective post-secondary institutions and high schools that historically have not sent many students to college;
- UT-Austin has established the Longhorn Opportunities Fellowship Program, a need-based scholarship that provides financial support to qualified students from high

schools with low college-going tradition. A&M has also established Century Scholarship program.

Given all these efforts, it is discouraging to find that Hispanic top 10% students are less likely to "know a lot about the law," due to low family SES. Hispanic top 10% students from predominately minority schools are particularly disadvantaged – they are less likely to "know a lot about the law" even after controlling for SES.

On the positive side, among second decile, third decile and below seniors, blacks and Hispanics are more likely to respond to the law by working harder to improve their class rank.

Table 1: Race/Ethnicity Distribution by School Segregation Strata:
Texas Public High School Seniors in 2002 (Row Percent)

Segregation Strata	White	Black	Hispanic	Asian	N
A. All Seniors					
Predominately White	89	2	6	3	1353
Majority White	71	9	15	4	3025
Integrated	55	15	24	6	2649
Majority Minority	25	5	67	2	788
Predominately Minority	8	15	75	2	3764
Total	*53*	*10*	*33*	*4*	*11579*
B. Top 10%					
Predominately White	83	0	2	14	197
Majority White	79	5	8	9	455
Integrated	68	6	12	14	382
Majority Minority	42	8	48	3	115
Predominately Minority	11	14	70	6	537
Total	*59*	*7*	*25*	*10*	*1686*
C. Difference: B-A					
Predominately White	-6	-2	-4	11	
Majority White	8	-4	-7	5	
Integrated	13	-9	-12	8	
Majority Minority	17	3	-19	1	
Predominately Minority	3	-1	-5	4	
Total	6	-3	-8	6	

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data.

Note: Weighted Percents; Unweighted N's.

   Predominately White: %White ≥ 80 %, Majority White: 60% ≤ %White < 80%, Integrated: 40% ≤ %White <
   Majority Minority: 20% ≤ %White < 40%, Predominately Minority: %White < 20%

Table 2: Probit Coefficients: (s.e. in parenthesis)
Top 10% Status among Texas Public High School Seniors in 2002

	Base	Base+Family SES
All Seniors (n=11579)		
Black	-0.41 (.051) ***	-0.29 (.053) ***
Hispanic	-0.26 (.033) ***	-0.08 (.037) *
Asian	0.49 (.057) ***	0.56 (.059) ***
Predominately White (n=1353)		
Black	-0.98 (.414) *	-0.94 (.409) *
Hispanic	-0.49 (.191) **	-0.30 (.202)
Asian	1.09 (.188) ***	1.21 (.201) ***
Majority White (n=3025)		
Black	-0.58 (.127) ***	-0.49 (.132) ***
Hispanic	-0.40 (.093) ***	-0.18 (.100)
Asian	0.38 (.123) **	0.40 (.127) **
Integrated (n=2649)		
Black	-0.73 (.110) ***	-0.66 (.115) ***
Hispanic	-0.60 (.089) ***	-0.42 (.094) ***
Asian	0.34 (.103) ***	0.39 (.107) ***
Majority Minority (n=788)		
Black	-0.04 (.242)	0.08 (.252)
Hispanic	-0.46 (.128) ***	-0.33 (.139) *
Asian	-0.09 (.337)	0.05 (.338)
Predominately Minority (n=3764)		
Black	-0.37 (.103) ***	-0.30 (.105) **
Hispanic	-0.30 (.088) ***	-0.22 (.092) *
Asian	0.44 (.121) ***	0.52 (.122) ***

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data.
***: p<0.001, **: p<0.01, *: p<0.05

Table 3: Knowledge of the Top 10% Law:
Texas Public High School Seniors in 2002 (Row Percent)

	None	A Little	Some	A Lot	N	Col. Percent
All Seniors						
White	31	17	20	31	*5270*	53
Black	35	20	23	22	*1467*	10
Hispanic	40	20	23	17	*4160*	33
Asian	18	16	17	50	*594*	4
Total	*34*	*18*	*21*	*26*	*11491*	*100*
Top 10%						
White	6	11	21	62	*897*	59
Black	12	16	12	60	*128*	7
Hispanic	7	15	24	54	*467*	25
Asian	1	5	12	81	*191*	10
Total	*6*	*12*	*20*	*62*	*1683*	*100*
Second 10%						
White	22	15	23	40	*1040*	61
Black	21	16	21	43	*194*	8
Hispanic	24	20	28	29	*607*	27
Asian	8	20	25	47	*112*	4
Total	*22*	*17*	*24*	*37*	*1953*	*100*
Third 10% and Below						
White	41	19	20	20	*3333*	50
Black	41	21	24	14	*1145*	12
Hispanic	48	21	21	9	*3086*	36
Asian	36	23	17	25	*291*	3
Total	*43*	*20*	*21*	*16*	*7855*	*100*

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data.
Note: Weighted Percents; Unweighted N's.
Based on quest #33 "How much have you heard about the Top 10% Rule (guaranteeing automatic admission to the top 10% of a high school class to Texas public colleges and universities)?"

Table 4: Probit Coefficients: (s.e. in parenthesis)
"Know A Lot About the Law" among Top 10% Texas Public High School Seniors in 2002

	Base	Base+Family SES
All Top 10% Seniors (n=1683)		
Black	0.01 (.121)	0.15 (.126)
Hispanic	-0.28 (.072) ***	0.01 (.084)
Asian	0.39 (.109) ***	0.54 (.114) ***
Predominately Minority (n=382)[a]		
Hispanic	-0.71 (.192) ***	-0.51 (.210) *
Top 10% Seniors with a 4-Year College as 1st Preference (n=1376)		
Black	0.19 (.141)	0.26 (.146)
Hispanic	-0.21 (.083) **	0.00 (.095)
Asian	0.56 (.127) ***	0.68 (.132) ***
Predominately Minority (n=293)[a]		
Hispanic	-0.65 (.220) **	-0.52 (.240) *

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data.

***: $p<0.001$, **: $p<0.01$, *: $p<0.05$

a: Black and Asian top 10% students are dropped out of the sample due to small case numbers.

Table 5: Knowledge of the Top 10% Law by Enrollment Status:
Top 10% Texas Public High School Seniors in 2002 (Row Percent)

	None	A Little	Some	A Lot	N	Col. Percent
All Top 10% Seniors						
White	6	13	22	59	*414*	58
Black	14	18	9	60	*99*	7
Hispanic	7	11	22	60	*215*	26
Asian	0	7	9	84	*140*	10
Total	*6*	*12*	*20*	*62*	*868*	*100*
Non-Enrollees						
White	0	20	19	61	*14*	34
Black	57	0	27	16	*12*	13
Hispanic	32	7	23	38	*23*	50
Asian	0	38	51	10	*3*	2
Total	*24*	*11*	*23*	*42*	*52*	*100*
Enrolled at a 2-Year Institutions						
White	16	20	22	41	*52*	61
Black	6	62	4	27	*12*	8
Hispanic	6	22	38	34	*31*	24
Asian	0	9	5	86	*10*	7
Total	*12*	*23*	*23*	*41*	*105*	*100*
Enrolled at a 4-Year Institutions						
White	5	11	23	62	*348*	59
Black	8	11	6	75	*75*	6
Hispanic	2	10	19	68	*160*	24
Asian	0	7	9	85	*127*	11
Total	*4*	*10*	*19*	*67*	*710*	*100*

Source: Texas Higher Education Opportunity Project, Senior Wave 2 Data.

Note: Weighted Percents; Unweighted N's.

Table 6: Effects of the Top 10% Law:
Texas Public High School Seniors in 2002 (Row Percent)

	Improving Rank	Competing for Grades	NA (Know None About the Law)	N
All Seniors				
White	10	13	32	*5251*
Black	10	10	36	*1456*
Hispanic	11	9	41	*4129*
Asian	16	14	19	*589*
Total	*11*	*11*	*35*	*11425*
Top 10%				
White	20	28	6	*894*
Black	16	22	14	*127*
Hispanic	21	24	7	*463*
Asian	16	17	1	*190*
Total	*20*	26	*6*	1674
Second 10%				
White	16	*18*	22	*1036*
Black	23	*24*	21	*192*
Hispanic	21	*15*	24	*603*
Asian	28	*22*	8	*112*
Total	*18*	*18*	*22*	*1943*
Third 10% and Below				
White	5	*7*	41	*3321*
Black	8	*6*	42	*1137*
Hispanic	8	*6*	50	*3036*
Asian	10	*9*	38	*287*
Total	*7*	6	*44*	7808

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data.
Note: Weighted Percents; Unweighted N's.
Based on question #35: "How has the top 10% rule affected your college plans
 "It has made me work harder to improve my school rank,"
 "It has increased student competition for good grades."

Appendix 1: Independent Variables: Means

Variable	Mean	Mean By Race/Ethnicity			
		White	Black	Hispanic	Asian
All Seniors					
N	*11579*	*5279*	*1483*	*4199*	*600*
Parental Education					
Less Than High School	0.17	0.05	0.08	0.36	0.16
High School	0.22	0.23	0.25	0.22	0.18
Some College	0.23	0.28	0.30	0.17	0.15
College and Higher	0.25	0.36	0.24	0.11	0.36
Don't Know/Missing	0.11	0.08	0.13	0.15	0.15
Home Ownership					
Rent	0.17	0.11	0.35	0.18	0.18
Own	0.77	0.85	0.54	0.75	0.74
Don't Know/Missing	0.06	0.05	0.11	0.07	0.08
Top 10% Seniors					
N	*1686*	*899*	*128*	*467*	*192*
Parental Education					
Less Than High School	0.12	0.02	0.05	0.34	0.14
High School	0.19	0.18	0.25	0.22	0.17
Some College	0.22	0.24	0.38	0.17	0.15
College and Higher	0.42	0.54	0.28	0.18	0.47
Don't Know/Missing	0.05	0.02	0.04	0.09	0.07
Home Ownership					
Rent	0.12	0.07	0.30	0.16	0.13
Own	0.84	0.91	0.63	0.79	0.81
Don't Know/Missing	0.04	0.02	0.08	0.04	0.06

Source: Texas Higher Education Opportunity Project, Senior Wave 1 Data