

Assessing state policy on postsecondary completion: Texas vs. SREB peers.

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ABSTRACT

Prompted by changing demographics, economic pressures, and global competition, Texas and members of the Southern Regional Education Board adopted policies to boost minority enrollment and success in higher education around the turn of the century. This study draws upon IPEDS graduation rate data for a benchmark year, 2002, and for 2006 through 2012 to assess the effectiveness of Texas' Closing the Gaps policy in relation to graduation rates at 4-year institutions and to similar policies in six SREB-member states. Descriptive and independent-samples *t* tests measured the effectiveness of Texas' Closing the Gaps compared to the selected SREB states. Although Texas fell below the SREB average graduation rates for targeted groups at the outset, data revealed variable but overall improvement for the grand total, Black, Hispanic, and White cohorts over the 10-year period for all states.

Keywords: graduation rates, college completion, minority students, Closing the Gaps, Southern Regional Education Board

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INTRODUCTION

Prompted by changing demographics, economic pressures, and global competition, many states have introduced policies to improve minority enrollment and success in higher education. According to the U.S. Census Bureau, the 2010 Texas population comprised 11.9% Blacks (non-Hispanic), 37.6% Hispanics, and 45.3% Whites (non-Hispanic) (Ennis, Rios-Vargas & Albert, 2011; Hixson, Helper, & Kim, 2011; Rastogi, Johnson, Hoeffel, & Drewery, 2011).

Demographers found that the most rapidly growing segments of the Texas population did not pursue postsecondary education at the same rate as Whites. In 2000, 33% of White Texans between ages 25 and 65 had received a bachelor's degree whereas only 14% of all other ethnicities had earned the same degree. Noting these circumstances, state demographer Steve Murdock warned, "if participation and graduation rates remain low, the poverty rate in Texas will increase by 3% and the average Texas household income will decline by \$3,000 in constant dollars by 2030" (THECB, 2001, p. 5). In addition, it was noted in 2002, that if individuals of all ethnic groups had achieved the same educational and salary level as Whites, the revenue generated through taxes in Texas would increase approximately \$16 billion (Truath, 2003). The prospective decline in the share of citizens with higher education degrees, the likely loss of state revenue, and the increased poverty rate led the Texas Higher Education Coordinating Board (THECB) to adopt and implement the Closing the Gaps policy in October 2000 (THECB, 2001).

Texas' Closing the Gaps policy (THECB 2001) comprises four parts with two goals related to student enrollment by 2015: grow student enrollments, and expand minority participation and success. The latter goal, to improve student success through increasing state institutions' aggregate graduation rates for Black and Hispanic students, by 16,000 and 50,000, respectively for certificates, associate's, or bachelor's degrees by 2015 prompted the present study.

BACKGROUND

Texas belongs to the Southern Regional Education Board (SREB), a regional policy organization founded in 1948 to improve education at all levels through policy advisement. SREB consists of 16 members: Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. The SREB adopted its Challenge to Lead for Education (2002) policy to improve graduation and certificate completion rates at higher education institutions. As a result, many members originated policies just prior to or after the adoption of the Challenge to Lead goals and Closing the Gaps.

To establish a context for this study, researchers examined SREB states' demographics and policies related to undergraduate participation and completion to find those similar to Texas. Researchers selected six states for comparative analyses: Arkansas, Florida, Louisiana, Maryland, Oklahoma, and Virginia.

This study compared the effectiveness of the retention and graduation policies for undergraduates at 4-year institutions under Texas' Closing the Gaps to the selected SREB-member states. Specifically, researchers investigated (a) the graduation rates for the grand total, Black, Hispanic, and White undergraduates at 4-year institutions in Texas and selected SREB states for cohort years ending in 2002, 2006, 2007, 2008, 2009, 2010, 2011, and 2012, and (b) the differences in annual graduation rates for the grand total, Black, Hispanic, and White

undergraduates at 4-year institutions between Texas and the selected SREB states for the same period.

METHOD

For the comparative portion of the study, researchers used the six SREB states selected for similar demographics and/or postsecondary graduation policies to Texas and to Closing the Gaps. Descriptive and independent-samples *t* tests measured the effectiveness of Texas' Closing the Gaps policy compared to the selected SREB states of Arkansas, Florida, Louisiana, Maryland, Oklahoma, and Virginia.

The descriptive statistics consisted of the mean and standard deviation of graduation rates of the grand total, Blacks, Hispanics, and Whites for Texas and the selected SREB states for the years 2002, 2006 through 2012. The 2002 IPEDS graduation rate data were collected to establish a benchmark for the study because it was the first year that 6-year cohort data were collected (National Postsecondary Education Cooperative, 2011). Independent-samples *t* tests were utilized to learn whether differences existed in the graduation rates for the grand total, Black, Hispanic, and White undergraduate students in 4-year degree-granting institutions between Texas and the selected SREB states for the years 2002, 2006 through 2012. The Levene test was utilized to address the homogeneity of variance. The effect size was also reported, where Cohen's (1992) conventional guidelines state that .01, .06, and .14 represent a small, medium, and large effect size, respectively. The alpha level of significance for this study was set at the .05 (Ary, Jacobs, & Razavieh, 2002).

DATA SOURCES

Researchers used archival data acquired from the U.S. Department of Education's National Center for Education Statistics (NCES) Integrated Postsecondary Education Data Systems (IPEDS) in the study. Cook and Polarro (2010) noted that IPEDS data were the best higher education resource for comparing similar institutions' graduation rates and factors that might impact student retention, because the data collection is mandated by the federal government.

Researchers eliminated institutions that did not submit to NCES their grand total, Black, Hispanic, and White cohort graduation rates for any year, leaving 69 Texas and 186 selected SREB states' 4-year institutions. The ratio data of grand total, Black, Hispanic, and White cohort graduation rates of public, private, and for-profit 4-year institutions granting bachelor's degrees divided by their institutions' first-time, full-time, degree-seeking students were obtained for the years 2002, and 2006 through 2012. The cohort data are the total number of students who completed their undergraduate degrees in 6 years or less.

RESULTS

Descriptive and inferential statistical analyses were used to answer the research questions. Figure 1 (see Appendix) shows average graduation rates of Texas and the selected SREB states for total undergraduate students for the benchmark year 2002 and years 2006 through 2012. As Figure 1 reveals, Texas showed steady increase over the ten-year period. Texas' total undergraduate graduation rates increased 2.0% from 42.0% in 2002 to 44.0% in

2012. The total for SREB peers increased by only 0.7% from 48.3% in 2002 to 49.0% in 2012. Figures 2, 3, and 4 (see Appendix) provide comparative results for Black, Hispanic, and White student groups over the years. In both SREB states and Texas, Black student graduation rates decreased over the period. Texas' Black student graduation rates showed a decrease of 2.1% from 37.3% in 2002 to 35.2% in 2012 compared to SREB rates which showed a smaller decrease of 0.4% from 44.7% in 2002 to 44.3% in 2012. For Hispanic student graduation rates, SREB showed a decrease whereas Texas showed an increase over the ten-year period. The graduation rates of Texas' Hispanic undergraduates showed significant increase, from 37.3% in 2002 to 43.5% in 2011, and then dropped to 40.7% in 2012 whereas the aggregate graduation rates of the selected SREB states' Hispanic undergraduates decreased by 3.5% from 52.1% in 2002 to 48.6% in 2012. As Figure 4 indicates, significant increase was also found in the White student group in Texas where graduation rates improved 4.8% from 42.6% in 2002 to 47.4% in 2012 compared to a 2.5% increase in SREB peers from 50.0% in 2002 to 52.5% in 2012.

Independent-samples *t* tests were conducted to assess statistical difference in graduation rates between Texas and the selected SREB states for benchmark year 2002 and years 2006 through 2012. Table 1 summarizes the results of independent-samples *t* test. In 2002, Texas had a lower total graduation rate ($M = 42.0$, $SD = 18.35$) than the selected SREB states ($M = 48.3$, $SD = 18.68$). However, a significant difference was not found ($p < .05$) between Texas and SREB peers. While Black students in Texas had lower graduation rates ($M = 37.3$, $SD = 20.56$) than Blacks in SREB peers ($M = 44.7$, $SD = 21.70$), no significant differences ($p < .05$) were found. Hispanic students in Texas had lower graduation rates ($M = 37.3$, $SD = 16.86$) than Hispanics in selected SREB peers ($M = 52.1$, $SD = 24.82$), and the difference was statistically significant $t(173.066) = 4.938$, $p = .000$. A moderate effect size of the difference was observed ($\eta^2 = .12$). There was also a significant difference in the graduation rates of White students in Texas ($M = 42.6$, $SD = 17.93$) and the selected SREB-member states ($M = 50.0$, $SD = 19.91$); $t(231) = 2.598$, $p = .010$, although the effect size was small ($\eta^2 = .03$).

Analysis of 2006 data showed statistically significant differences between Texas and selected SREB-member states in total, Hispanic, and White student groups. In 2007, there were significant differences in all ethnic groups. As table 1 demonstrates, significant differences were found in Black and Hispanic student groups in 2008 and only in Hispanic group in 2009. Then, no group difference was found either in 2010 or in 2011.

Finally, the independent-samples *t* tests for 2012 results showed that Texas had lower total graduation rates ($M = 44.0$, $SD = 19.00$) than the selected SREB states ($M = 49.0$, $SD = 18.62$). However, a significant difference was not found ($p < .05$) between Texas and SREB. A significant difference in graduation rates between Black students in Texas ($M = 35.2$, $SD = 20.49$) and in the selected SREB states ($M = 44.3$, $SD = 22.74$) occurred with $t(229) = 2.819$, $p = .005$. A small effect sized occurred ($\eta^2 = .03$). There was also a significant difference between Hispanic graduation rates in Texas ($M = 40.7$, $SD = 18.49$) and in the selected SREB states ($M = 48.6$, $SD = 21.66$), yielding $t(216) = 2.754$. A small effect size was observed ($\eta^2 = .03$). While White student graduation rates in Texas ($M = 47.4$, $SD = 18.80$) were lower than in the selected SREB states ($M = 52.5$, $SD = 19.86$), no significant ($p < .05$) difference was found between the two groups.

DISCUSSION

The findings of the study show that Texas' Closing the Gaps policy has improved bachelor's graduation rates in the state. In sum, the retention and graduation rates of the grand total, Black, Hispanic, and White undergraduates at 4-year institutions in Texas have increased since the implementation of the Closing the Gaps policy in 2000. In base year 2002, the Texas graduation rates of the grand total, Hispanic, and White students at 4-year institutions were significantly below those of the selected SREB states. In 2006, the Texas' grand total, Hispanic, and White graduation rates were lower than the selected SREB states. In 2007, Texas' Black, Hispanic, and White student graduation rates were significantly below the selected SREB states; but the state's grand total improved to within the range of SREB peers. In 2008, Texas' Black and Hispanic student graduation rates were below the SREB range, but the grand total and White student rates were comparable to the selected SREB states. In 2009, Texas' grand total, Black, and White graduations rates improved to be within the range of the selected SREB states. Texas' Hispanic student graduation rates continued significantly below the peer states. In 2010 and 2011, the graduation rates of Texas Black, Hispanic, and White students moved into the range of the selected SREB states. Finally, in 2012 the grand total and White graduation rates were within the range of the selected SREB states. However, the Black and Hispanic students' graduation rates fell below the range of the peer states.

These modest gains since the policy implementation do not guarantee that success will be either certain or rapid. According to the National Governors Association (NGA) *Complete to Compete* (2010), if Americans continue failing to obtain higher education degrees, by 2018, 3,000,000 jobs will remain unfilled for lack of educationally qualified employees. Furthermore, the NGA warned that by 2030, a gap of 7,000,000 degrees will exist in the United States if more citizens do not earn their degrees. In addition, according to the United States Census Bureau (2010), Texas ranked 31st in the nation in 2010 with 25.9% of citizens 25 years or older having completed a bachelor's degree compared to a national average of 28.2%. As a result, Texas needs to continue improving its Black, Hispanic, and White undergraduate graduation rates.

For Texas to continue its graduation rate improvement, policy makers should consider continuing the Closing the Gaps benchmarks for undergraduate participation and graduation as well as implement effective student retention and graduation policies from other states. For example, the Mississippi Trustees of State Institutions of Higher Learning (2009) task force on Black males' enrollment and success at public institutions recommended ways to increase student retention and graduation. Some of these strategies could be effective with other racial groups as well: expanding peer mentoring programs for first-year students, increasing student advisement, boosting student organization involvement, and informing families better about the social and financial benefits of acquiring a higher education degree.

Table 1

T test Statistics for the Selected SREB States and Texas

Population	Year	Graduation Rates				df	t
		Selected SREB States		Texas			
		M	SD	M	SD		
Black (non-Hispanic)	2002	44.7	21.70	37.3	20.56	215	2.267
Hispanic	2002	52.1	24.82	37.3	16.86	173.066	4.938*
White (non-Hispanic)	2002	50.0	19.91	42.6	17.93	231	2.598*
Grand Total	2002	48.3	18.68	42.0	18.35	245	2.390
Black (non-Hispanic)	2006	45.1	21.70	37.5	20.48	226	2.391
Hispanic	2006	50.3	24.00	40.7	16.61	170.066	3.325*
White (non-Hispanic)	2006	54.3	19.95	45.7	17.52	231	3.059*
Grand Total	2006	50.1	19.31	43.3	17.11	246	2.562*
Black (non-Hispanic)	2007	47.4	21.35	39.3	20.96	219	2.535*
Hispanic	2007	53.4	24.05	40.7	17.59	170.218	4.339*
White (non-Hispanic)	2007	53.8	20.15	45.5	18.35	235	2.869*
Grand Total	2007	50.3	19.61	44.0	19.05	246	2.277
Black (non-Hispanic)	2008	45.9	23.04	36.7	20.58	224	2.769*
Hispanic	2008	54.8	24.65	41.3	18.09	161.443	4.421*
White (non-Hispanic)	2008	51.7	18.41	46.6	19.57	228	1.857
Grand Total	2008	49.1	18.86	43.8	19.46	246	1.955
Black (non-Hispanic)	2009	45.0	22.94	38.9	21.46	230	1.839
Hispanic	2009	51.6	23.50	41.9	19.68	214	2.925*
White (non-Hispanic)	2009	52.6	20.53	46.9	20.27	236	1.944
Grand Total	2009	49.2	19.69	44.6	20.14	246	1.607
Black (non-Hispanic)	2010	44.9	23.69	37.5	21.40	230	2.193
Hispanic	2010	50.0	21.84	42.7	17.85	216	2.412
White (non-Hispanic)	2010	52.0	20.56	47.0	18.01	233	1.707
Grand Total	2010	48.5	20.15	43.9	18.48	246	1.626
Black (non-Hispanic)	2011	41.9	21.93	36.3	22.13	231	1.767
Hispanic	2011	48.4	21.15	43.5	17.04	215	1.648
White (non-Hispanic)	2011	53.2	19.75	48.5	19.28	232	1.618
Grand Total	2011	48.6	19.31	44.3	18.75	246	1.584
Black (non-Hispanic)	2012	44.3	22.74	35.2	20.49	229	2.819*
Hispanic	2012	48.6	21.66	40.7	18.49	216	2.623*
White (non-Hispanic)	2012	52.5	19.86	47.4	18.80	230	1.783
Grand Total	2012	49.0	18.62	44.0	19.00	246	1.882

* $p < .05$

Figure 1

Total Graduation Rates

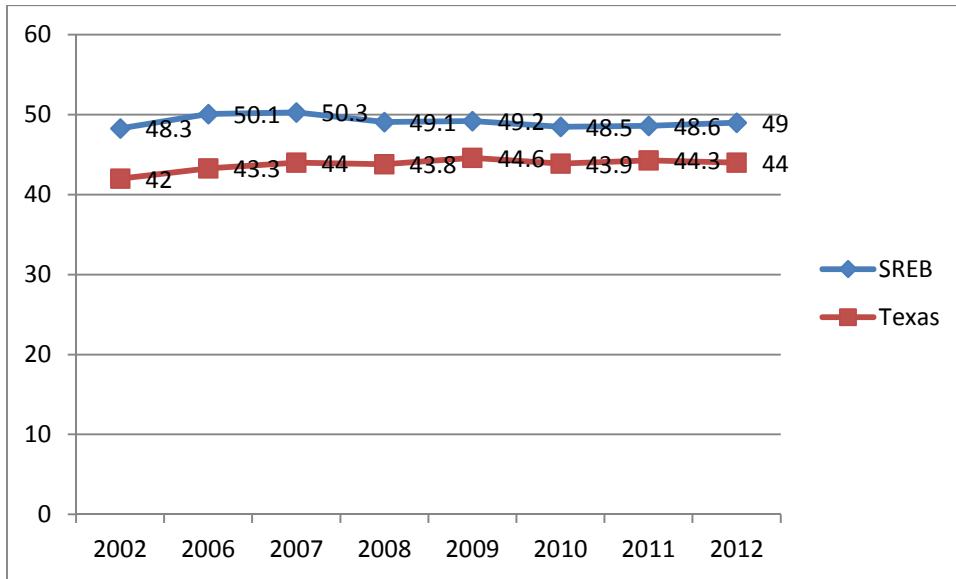


Figure 2

Black Graduation Rates

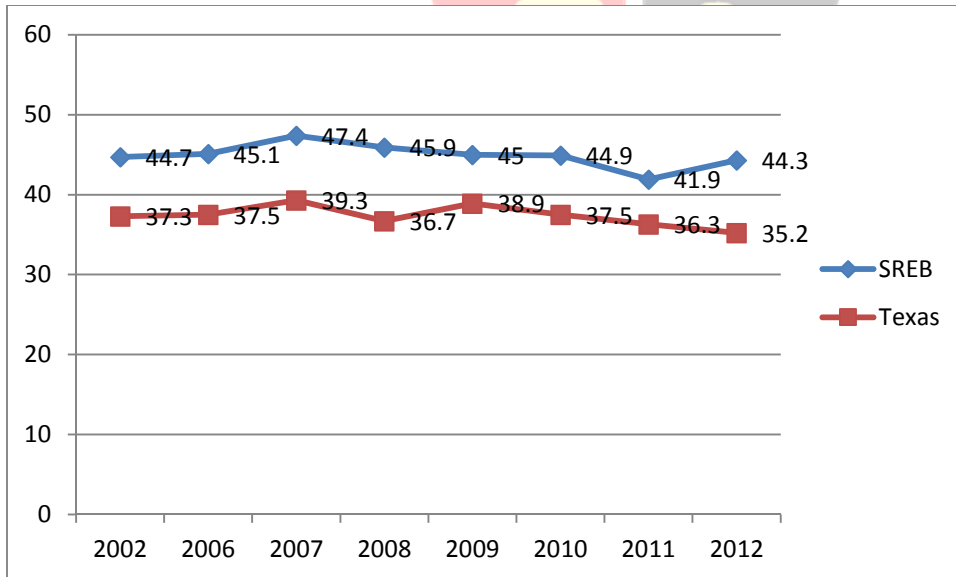


Figure 3

Hispanic Graduation Rates

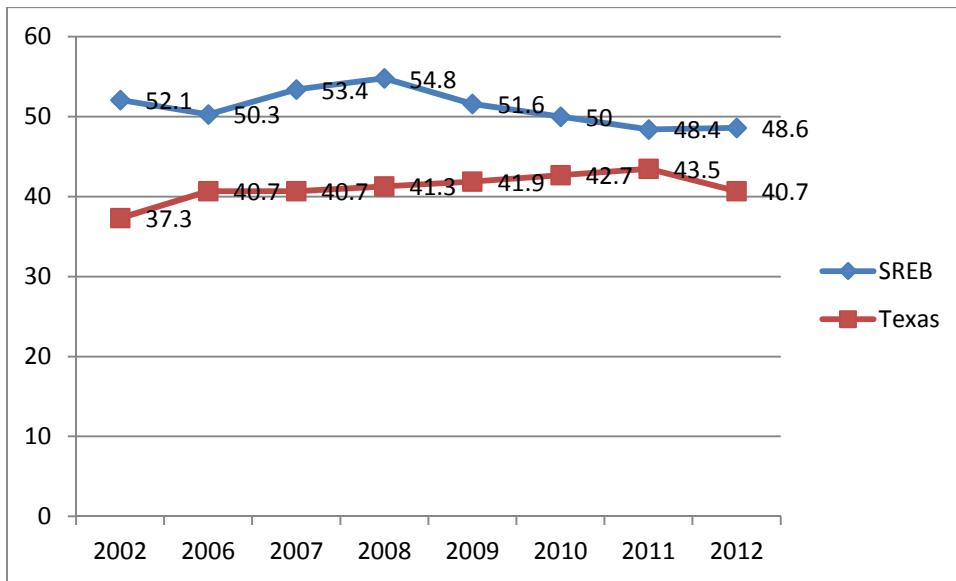
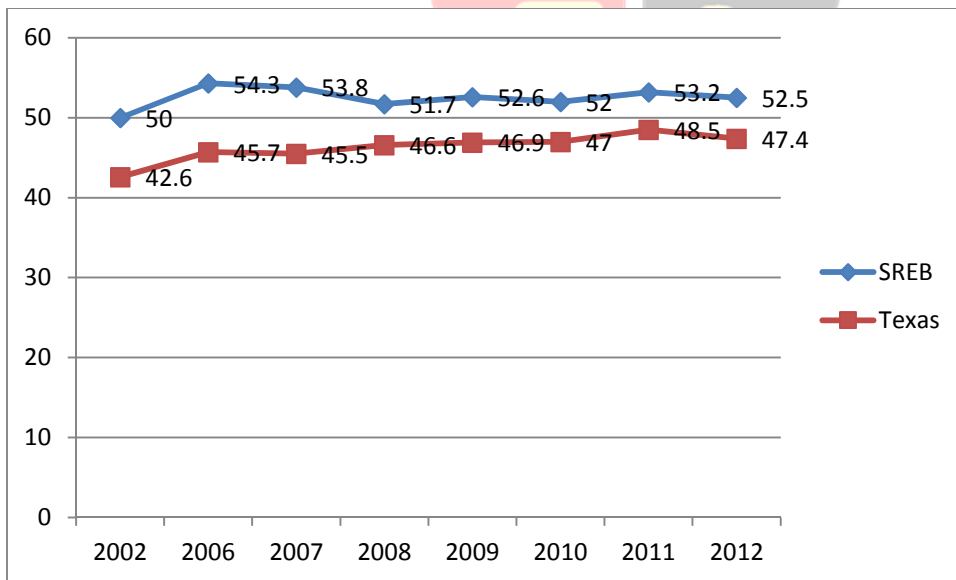


Figure 4

White Graduation Rates



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