



CENTRAL TEXAS
StudentFutures
PROJECT



2007 RESEARCH BRIEF

Highlights

In 2007, the Central Texas Student Futures Project produced two reports on the high school Class of 2006, based on a senior exit survey and an analysis linking school records and survey data to postsecondary education and employment records the fall after graduation.¹ Major findings from these reports are:

Findings from the 2006 Senior Surveys

- More than three fourths of seniors thought about college or technical school as a possibility before they entered high school.
- Nearly all seniors (95%) reported that their parents encouraged them to pursue further education beyond high school.
- Most respondents (>80%) felt that their high schools helped them further develop their knowledge and skills in major academic areas.
- Nearly 90% of seniors completed at least one college preparation activity. Most respondents (85%) applied to at least one postsecondary institution, and 67% applied to 4-year colleges.
- All seniors except for low-income students most frequently cited “parents” when asked who helped them most in applying for college and financial aid. Low-income students cited school counselors as most helpful with this process.
- While over 70% of respondents said that they may borrow money for college, only 40% responded that they or their parents had completed and submitted a FAFSA.

Education and Work After High School: A First Look at the Class of 2006

- In the fall of 2006, 42% of 2006 seniors were enrolled in postsecondary education.

Of those enrolled, 60% were attending a 4-year university, while the remaining 40% were attending 2-year colleges.

- For all youth in the data sample, 29% were only found enrolled in postsecondary education, 19% were employed and not enrolled in postsecondary education, 13% were both enrolled and employed, and 15% were neither enrolled nor employed. Additionally, 24% of the individuals lacked the data needed to be found in any of the available data sources.
- Seniors were more likely to enroll in 4-year colleges if they had engaged in college preparation activities (e.g., ordering/submitted transcripts, completing/submitted a FAFSA), had participated in sports or if their mother had at least a bachelor’s degree. They were less likely to enroll if they received weak parental encouragement, came from a low-income or Hispanic family, or began thinking about going to college somewhat later in their childhood, among other factors.
- Seniors were more likely to enroll in 2-year colleges or technical schools if they took college entrance tests, met with a counselor, or had been thinking about college as an option since childhood. They were less likely to enroll if they were unusually old, had been retained in the ninth grade, came from a low-income family, or their mother had at least a bachelor’s degree, among other factors.
- Factors related to enrollment in further education varied for students in different demographic groups. Also, those factors most positively linked with being employed after high school were often negatively linked to enrolling in 2- or 4-year colleges.

¹ See D. Schexnayder, G. Cumpston, & N. Beck (May 2007), *Findings from the 2006 senior surveys*; and C.T. King, D. Schexnayder, G. Cumpston, T. C. Smith, & C. Stolp, (November 2007, Revised), *Education and work after high school: A first look at the class of 2006*.



Overview of the Student Futures Project

The Student Futures Project—formerly the High School Graduate Data Center—is a research partnership of the Ray Marshall Center, Skillpoint Alliance, and a growing number of Central Texas independent school districts (ISDs). The project is documenting and analyzing the progress of Central Texas high school students as they move on to colleges and careers. District partners for the Class of 2006 were:²

- Austin ISD
- Del Valle ISD
- Leander ISD
- Manor ISD
- Pflugerville ISD
- Round Rock ISD

The project has begun to follow the progress of Central Texas high school students as they transition to postsecondary education and/or the workforce. As the project moves forward, the strength of the findings and their potential to guide education policy and program decisions in Central Texas will be even greater.

The Student Futures Project seeks to:

1. Provide ISDs, postsecondary institutions, and employers with comprehensive longitudinal research on what regional high

school students are doing after graduation, why they are making these decisions, and how educational, personal, and financial factors are related to their success in higher education and the workforce.

2. Foster educational improvement by sharing best practices through workshops and seminars, and promoting policy and program alignment for Central Texas ISDs.

Major Research Questions

Major research questions for the project are:

1. Which seniors are participating in postsecondary education and why?
2. Which seniors are going to work and why?
3. Which seniors are both working and participating in postsecondary education?

Data Sources

The Student Futures Project relies on a combination of student surveys and linked administrative records for its research. The data sources used in analyzing the 2006 senior sample are shown in the chart below.

Data Sources Summary

High school records Student demographics Courses taken Course grades	Senior survey Family background/influences High school experiences Preparation for life after high school
Postsecondary education records* National Student Clearinghouse (NSC) University of Texas at Austin directory information <small>* Through 12/06</small>	Employment records* Texas Unemployment Insurance (UI) wage records <small>* Through 12/06</small>

Definition of “Senior”

Except in Pflugerville ISD, 2006 seniors were defined as students enrolled on October 26, 2005 and considered seniors as reported by ISDs to the Texas Education Agency (TEA) through the Public Education Information Management System (PEIMS). In Pflugerville, seniors were defined as those students classified as 12th graders during each 6-week period of the 2006-07 school year. Differences between these two classifications were small.

² Eanes and Bastrop Consolidated ISDs joined in 2007. San Marcos and Hays Consolidated CISDs have signed on for 2008. Del Valle ISD had very few responses in 2006 and is not featured in this analysis.



Research Methods

Survey report: The 2006 senior survey sought student information that was not contained in existing school records, including:

- Family background and influences on students' views toward education beyond high school;
- High school experiences; and
- Preparation for life after high school.

The survey was administered in the spring of 2006, and 5,146 seniors in 5 districts (57% of all seniors) completed the survey. Survey response rates varied widely by ISD:

- Austin, 81%
- Pflugerville, 37%
- Leander, 63%
- Round Rock, 19%
- Manor, 53%

Due to both its size and high response rate, 69% of all survey respondents attended an Austin ISD high school. Survey responses for the major survey categories were analyzed

both for all respondents and for selected population groups of interest. Selected findings in the key topics covered by these surveys are summarized below. All reported differences among population groups are both large and statistically significant.

First Look report: Postsecondary enrollment and employment outcomes through December 2006 were computed for 8,295 seniors (90% of all seniors) in the five participating districts for whom identifying information was available. Multivariate regressions on a sample of 3,800 seniors were used to determine those factors statistically linked to enrollment in either 4-year or 2-year postsecondary education. Results for all students, as well as for specific populations of interest to project funders (Hispanic and first-generation college students) are presented in this summary. The full research report includes education regression results for other race/ethnic groups and employment regression results for all groups.

Findings from the 2006 Senior Surveys

Characteristics of Survey Respondents

The demographic characteristics of survey respondents were quite varied. Slightly more females than males responded. Nearly half were White, 35% were Hispanic and 12% were Black. Nearly three of every ten came from low-income families. Over 80% expected to attend college within a year of graduation.

In general, the demographic characteristics of survey respondents reflect those of the senior classes from which they were drawn. Across all districts, the pool of total survey respondents includes slightly more Hispanic and low-income students and fewer White and Asian students than expected based on the demographics of the entire population. This is due to a higher overall survey response rate (81%) by Austin ISD seniors than in other school districts and that school district's higher share of Hispanic and low-income students.

	#	%
Total	5,146	100
Ethnicity		
White or Caucasian	2,471	48
Hispanic, Latino, of Spanish Origin	1,794	35
Black	598	12
Asian or Pacific Islander	228	4
Other	27	1
Gender		
Female	2,711	53
Male	2,434	47
Family Income Status		
Low income	1,513	29
Not low income	3,603	71
Plans for Further Education		
Going to college/technical school	4,187	82
Not going to college/technical school	892	18
School Income Status		
Low income	1,916	37
Not low income	3,228	63
Mother's Education Level		
Below a bachelor's degree	2,944	65
Bachelor's degree or above	1,617	35
First-Generation College Goer		
Yes	1,607	31
No	3,539	69

More Definitions:

Central Texas = Hays, Travis, and Williamson counties, with 22 school districts

6 ISDs Participating in 2006 = Austin, Del Valle, Leander, Manor, Pflugerville, and Round Rock

Postsecondary Enrollment = Enrolled in postsecondary education through December 2006 in Texas or elsewhere in the nation, based on college directory information collected by the National Student Clearinghouse (NSC) from over 3,000 participating colleges nationwide and gathered directly from the University of Texas at Austin

Employment = Employed in Texas during the 4th calendar quarter of 2006, based on UI wage records maintained by the Texas Workforce Commission (TWC)

FAFSA = Free Application for Federal Student Aid, which is typically required by all postsecondary institutions prior to any financial aid awards being granted

Low-Income Families = Families who participate in the Temporary Assistance for Needy Families (cash welfare), Food Stamp or free/reduced-price school meal programs.



Family Background/ Influences

While nearly all seniors (95%) reported that their parents encouraged them to pursue further education beyond high school, the extent of parental encouragement varied among groups.

- Students planning to pursue further education and White students were significantly more likely to say that their parents encouraged them “a great deal.”
- Students not planning to pursue further education, Hispanic students, and first-generation students were more likely to respond that their parents had only “somewhat” encouraged further education.

	A Great Deal of Encouragement	Somewhat Encouraged
Planning further ed	82%	13%
Not planning further ed	56%	34%
First generation	69%	24%
Not first generation	82%	14%
White	82%	13%
Hispanic	73%	21%
Black	74%	20%
Asian	82%	13%

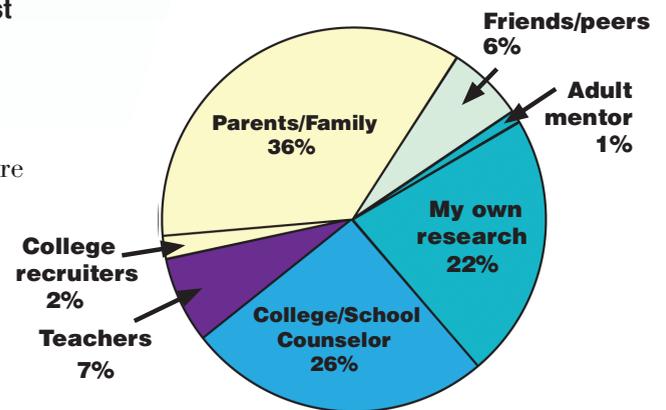
Students also differed in when they first began to consider college.

- More than three fourths of seniors reported thinking about college or technical school as a possibility before high school. However, 44% of all respondents did not report thinking about college as an option until at least middle school.
- Students planning to pursue further education, White, Asian, and female students were far more likely to have thought about college as an option for “as long as I can remember.”

- Over half of all low-income students, students attending low-income high schools, and first-generation students reported that they did not think about college as an option until middle or high school.
- Black students were more likely to begin thinking about college as an option while in middle school. Hispanic students and male students were more likely to begin thinking about college as an option while in high school.

Students also responded differently to questions asking them who was most helpful in preparing them to apply to college and in obtaining financial aid.

- Across all respondents, seniors most frequently cited “parents” when asked who helped them most in applying for college and for financial aid.
- White students were more likely to identify parents and/or family members as most helpful than were other race/ethnic groups.
- Unlike other groups of students, low-income students stated that school and/or college counselors were most helpful with this process.





High School Experiences

Most respondents (96%) reported participating in non-classroom activities. The types of extracurricular activities in which students participated varied widely.

- Asian, White, and female students, as well as students planning to pursue further education, reported significantly higher participation in community service activities.
- Low-income, first-generation, Hispanic, Black, and female students reported significantly higher rates of providing routine care to family members.

	Community Service (%)	Family Care (%)
Pursuing higher education	48	26
Not pursuing higher education	24	30
First generation	36	38
Not first generation	47	21
Low income	35	43
Not low income	47	20
White	51	16
Hispanic	34	38
Black	36	34
Asian	60	21
Female	51	30
Male	32	23

Approximately two thirds (68%) of high school seniors reported working during their senior year.

- Asian students were much less likely to work during their senior year.
- Low-income and first-generation students, as well as students not planning to pursue further education, were more likely to work 16 or more hours/week.

Most students (88%) reported studying during their senior year, with most reporting between 1-5 hours/week.

- Male students and those students not planning to pursue higher education were less likely to report any studying.
- Asian students reported studying more often than White, Black, and Hispanic students.

Preparation for Life After High School

Students differed in the degree to which they felt their high schools had helped them develop their knowledge and skills.

- Overall, 80% of respondents felt that their high schools had helped them further develop their knowledge and skills in major academic subject areas.
- Students intending to pursue further education and male students were more likely to give their schools the highest ratings for furthering their skills in mathematics and science.
- Asian students were significantly more likely than others to rate their schools highly for furthering their mathematics skills.

There were large and significant differences among student groups in the number of college preparation activities completed.

- While nearly 90% of seniors reported completing at least one college preparation activity, students planning to pursue further education and female students were more likely to have completed four or more activities.
- Female students, students planning further education, White, and Asian students were also significantly more likely to complete individual college preparation activities than other student groups.

Activities	% of Respondents Completing
Took college entrance tests (typically SAT or ACT)	67
Took PSAT	59
Visited one or more college campuses	56
Completed Distinguished Achievement or Recommended High School Plan	56
Completed one or more AP/IB course	47
Ordered and submitted a transcript to a postsecondary institution	44
Completed and submitted a FAFSA	40
Completed and submitted a scholarship application	34
Completed ACC courses	22

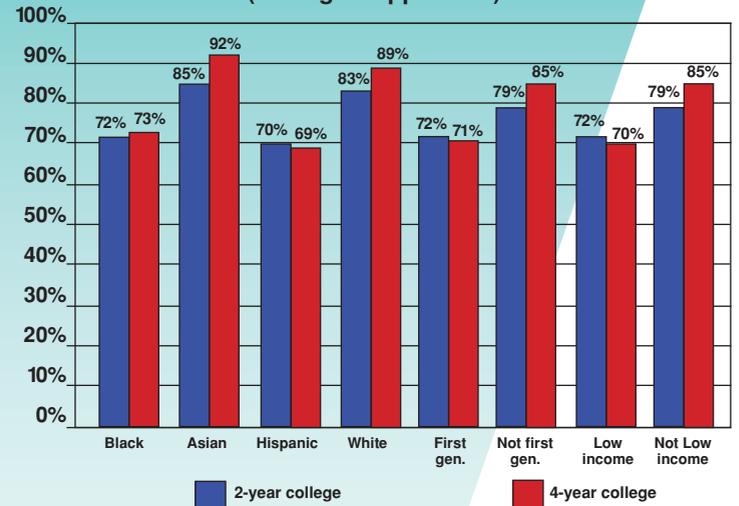


While 85% of respondents reported applying to at least one postsecondary institution, there were differences among the student groups in rates of application and acceptance.

- Although 67% of seniors applied to 4-year colleges, students attending low-income high schools, first-generation, low-income, Black, and Hispanic students were more likely to report applying to a 2-year college.
- White and Asian students were more likely to report acceptance to a 4-year college than other race/ethnic groups.

Over 70% of respondents said that they might borrow money for college, but only 40% of respondents reported that they or their parents had submitted a FAFSA.

Acceptance Rates to Postsecondary Education (among all applicants)



- Of students who had applied to a postsecondary institution, female students were more likely to have completed a FAFSA than males.
- Hispanic students were less likely to have completed a FAFSA than students from other race/ethnic groups.



Education and Work After High School: A First Look at the Class of 2006

Enrollment in Postsecondary Education and Employment as of December 2006

- Over 60% of 2006 seniors were enrolled in postsecondary education, employed in the State of Texas, or both by the end of 2006. Of the 42% participating in further education, 60% attended a 4-year college or university and 40% attended 2-year schools.
- Asians, Whites, non-low-income seniors and those whose mothers had at least a bachelor's degree enrolled in 4-year colleges and universities at higher rates than other seniors. Enrollment rates in 2-year schools were fairly evenly distributed across demographic groups.
- Postsecondary enrollments rates for individual high schools within most districts were similar. In Austin ISD, overall enrollment rates varied widely by high school.
- Hispanics, Blacks, low-income seniors and those whose mothers had less than a bachelor's degree were employed at higher rates than seniors from other demographic groups.

Postsecondary Enrollment Rates in 2-year or 4-year Institutions for 2006 Central Texas Seniors, Fall 2006

Total	#	%
	8,295	42%
Ethnicity		
White	4,052	48
Hispanic	2,625	33
Black	1,140	37
Asian	455	49
Gender		
Female	4,182	42
Male	4,113	41
Family Income Status		
Low income	2,413	30
Not low income	5,730	47
Unknown	152	
Mother's Education Level		
Below a bachelor's degree	3,072	43
Bachelor's degree or above	1,445	58
Unknown	3,778	
School Income Status		
Low income	2,338	32
Not low income	5,957	46
First-Generation College Goer		
Yes	1,501	38
No	3,016	53
Unknown	3,778	

Percents within categories do not sum to 100%; each group is a fraction of 100%.





Factors Associated with Enrollment in Postsecondary Education

After controlling for other factors, youth in the full sample were more likely to enroll in 4-year colleges if they had:

- Engaged in specific college preparation activities, including taking college entrance tests (SAT, ACT), ordering and submitting transcripts, or completing and submitting a FAFSA; or
- Participated in school-related sports.

Youth in the full sample were less likely to enroll in 4-year colleges if they:

- Began thinking about college since childhood or later;
- Received weaker parental encouragement; or
- Were Hispanic or members of low-income families.

Factors Related to Enrollment in 4-Year Postsecondary Education (N = 3,800)

Factor	More Likely to Enroll			Less Likely to Enroll		
	All	Hisp	1st Gen	All	Hisp	1st Gen
Ordering and submitting transcripts	↗	↗	↗			
Participating in school-related sports	↗	↗	↗			
Taking college entrance tests (SAT, ACT)	↗	↗				
Completing and submitting FAFSA	↗					
Visiting one or more college campuses	↗					
Mother has at least a bachelor's degree	↗					
Meeting w/ counselor about 4-year plans		↗				
Credit for foreign language in 8th grade		↗				
Completing and submitting scholarship applications			↗			
Taking the PSAT			↗			
Thinking about college as an option since childhood (vs. "for as long as I can remember")				↘	↘	↘
Weaker parental encouragement				↘		↘
Completing ACC courses while in high school				↘		
Being Hispanic				↘		
Being Low income				↘		

All = All students Hisp = Hispanic 1st Gen = First-generation college goer



After controlling for all other factors, youth in the full sample were more likely to enroll in 2-year colleges if they:

- Took college entrance tests (SAT, ACT)
- Met with a counselor about financial aid
- Met with a counselor about course selection/placement, or
- Began thinking about college since childhood (vs. “as long as I can remember”).

Youth in the full sample were less likely to enroll in 2-year colleges if they:

- Were much older than average
- Came from a low-income family
- Had weaker parental encouragement, or
- Had characteristics associated with more likely enrollment in 4-year colleges.

Factors Related to Enrollment in 2-Year Colleges or Technical Schools (N = 3,800)

Factor	More Likely to Enroll			Less Likely to Enroll		
	All	Hisp	1st Gen	All	Hisp	1st Gen
Taking college entrance tests (SAT, ACT)	↗	↗	↗			
Thinking about college as an option since childhood (vs. “for as long as I can remember”)	↗	↗	↗			
Meeting w/ counselor about financial aid	↗					
Meeting w/ counselor about career information	↗					
Working between 6-10 (vs. 16+) hours per week during senior year			↗			
Completing and submitting scholarship applications				↘	↘	↘
Being low income				↘	↘	↘
Being much older than average				↘	↘	↘
Weaker parental encouragement				↘	↘	
Being retained in 9th grade				↘		
Mother has at least a bachelor’s degree				↘		
Visiting one or more college campuses						↘
Meeting w/ counselor about personal/family issues						↘
Being Black						↘
Completing ACC courses					↘	

All = All students Hisp = Hispanic 1st Gen = First-generation college goer

Some results varied when the sample was restricted to students within specific demographic groups. Results for Hispanic and first generation students are displayed in the charts; specific results for other demographic groups are included in the full report.

Youth in the full sample who completed ACC courses while in high school were less likely to enroll in 4-year institutions, and Hispanic youth who completed ACC courses in high school were less likely to enroll in 2-year colleges. Further exploration is underway to better understand the reasons for these unexpected findings.



83% of seniors said that they planned to enroll in further education within a year after high school graduation, but only 48% had actually done so by December 2006.

Source: Analysis of survey responses and postsecondary education outcomes for the 4,483 individuals in both databases

Conclusions from the 2007 Research Reports

The findings clearly demonstrate the value of the research approach. Regression models that link information from individual school and employment records with student background information obtained via a senior student survey perform better than statistical models that rely solely on education and employment records. Studies that rely solely on these administration records miss important differences that are significantly associated with the students' transitions after high school graduation.

Despite widely varying demographic characteristics, surveyed students strongly agreed about:

- Their families' influence on their potential college attendance and assistance in preparing for college;
- Their high school experiences including: participation in extracurricular activities, working during their senior year, and studying during their senior year; and
- Their preparation for life after high school, both their academic preparation, and specific college preparation activities.

Students in various demographic groups cited major differences in:

- The extent of parental encouragement to pursue further education beyond high school;
- When they first began to think about college as a possibility;
- Who was most helpful in preparing them to apply to college and in obtaining financial aid information;
- The types of extracurricular activities in which they participated;
- The likelihood of working 15 or more hours per week;

- The likelihood of studying during senior year;
- The likelihood of giving their schools the highest ratings in helping to develop their knowledge and skills in science and mathematics;
- The likelihood of completing the activities (taking college entrance exams, applying to colleges, ordering transcripts, etc.) needed to pursue further education successfully; and
- The likelihood of applying to a 2-year college.

Education and student background factors are related to overall 2-year and 4-year postsecondary enrollment in different ways. These factors also work differently for seniors from different socioeconomic, race/ethnic, and family backgrounds.

- Meeting with counselors about career information was positively related to enrollment in a 2-year college for all students, but not significantly related to enrollment in a 4-year university.
- Meeting with counselors about course selection/placement was positively related to enrollment in a 2-year college for first-generation college-goers and Hispanic students, but was not a significant factor for the overall sample.

Factors most strongly related to employment after high school are generally opposite to those affecting initial college enrollment.

Some results varied from the existing research literature.

- While other researchers have found that female students are far more likely to attend college than male students, gender was not found to be a significant factor in this study.



Recommendations

- Schools, districts, and other stakeholders should tailor college preparation programs and policies to meet the needs of different groups of students rather than adopting one-size-fits-all approaches, as some groups of students may need additional encouragement and/or support.
- School districts and the community should focus on strategies to create a college-going culture much earlier in students' school careers, focusing particularly on prekindergarten and early elementary school.
- Schools should work harder to involve parents in their efforts to create a college-going culture. Weak parental encouragement to attend college was strongly and negatively related to students' enrolling in postsecondary education following high school graduation.
- High schools need to strengthen counseling, college preparation, and extracurricular activities (particularly sports), all of which appear to play significant roles in transitions to college for some parts of their student population.

Future Research/Next Steps

Research

- Release 2007 Senior Exit Survey Report,
- Incorporate longer-term outcomes data and data for additional Central Texas school districts, and
- Investigate school-level variables to describe differences among educational programs and individual high schools.

Dissemination

- Present research results to education, business and community stakeholders, and
- Collaborate with school districts and other entities to foster regional educational improvement.





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Round Rock ISD

2007 Research Brief Editors

Christopher T. King
Deanna Schexnayder
Nicole Beck

Additional Contributions

Skillpoint Alliance staff

Graphic Design

Mark Mitchell/www.stilpoint.com

For additional information about these findings, see the following research reports:

D. Schexnayder et al.,
Findings from the 2006 senior surveys, May 2007

C.T. King et al.,
Education and work after high school: a first look at the class of 2006 (November 2007, revised)

All project reports can be downloaded from:

www.centexstudentfutures.org



Austin
Chamber of Commerce

BILL & MELINDA
GATES foundation



Ray Marshall Center for the Study of Human Resources

Lyndon B. Johnson School of Public Affairs
The University of Texas at Austin
3001 Lake Austin Blvd., Suite 3.200
Austin, TX 78703
512-471-7891 voice • 512-471-0585 fax
www.utexas.edu/research/cshr/

Skillpoint Alliance

201 East 2nd Street, Suite B
Austin, Texas 78701
512-323-6773 voice
512-323-5884 fax
www.skillpointalliance.org