

Copyright
by
Nicole Marie Beck
2009

Postsecondary Choices of Central Texas Graduates

by

Nicole Marie Beck, B.S.E.

Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Public Affairs, Master of Business Administration

The University of Texas at Austin

May 2009

Postsecondary Choices of Central Texas Graduates

Approved by

Supervising Committee:

Acknowledgements

Thank you to my readers – Dr. Chandler Stolp, Dr. Christopher T. King and Deanna Schexnayder – who went above and beyond the typical reader responsibilities to ensure this report contributed in a meaningful way to existing work. Additionally, I would like to thank Greg Cumpton for all his assistance in putting together the data for my analysis. Finally, I would like to thank my friends and family, including Dustin Hawkins, for without their motivation this work may have never been completed.

Postsecondary Choices of Central Texas Graduates

Nicole Marie Beck, *M.P.Aff., M.B.A.*

The University of Texas at Austin, 2009

Supervisor: Chandler Stolp

The educational achievement gap has remained a topic of discussion for decades. However, much of the focus has revolved around outcomes such as graduation rates or drop-out rates. This report focuses further in the future for the Class of 2006 Central Texas graduates. First, it examines qualifications that local graduates have to test the hypothesis that minority and low-income graduates qualify for highly competitive universities at lower rates than their counterparts due to a lack of social capital. Second, it examines if graduates are subsequently choosing to enroll in postsecondary institutions which match their academic qualifications again looking to see if differences exist between subgroups of students. Upon analysis, lower shares of low-income and minority graduates have highly competitive academic qualifications when compared to their counterparts. However, no significant differences existed between subgroups of students in regards to whether or not they attended an institution which matched their qualifications. Further research is needed to flesh out the consequences of attending or not attending a “match” school.

Table of Contents

Chapter 1. Introduction	1
Problem Definition.....	2
Data Set for Analysis	2
Overview of Report.....	4
Goals and Objective.....	4
Chapter 2. Literature Review	7
Defining Social Capital.....	7
Effects of Social Capital on Minority and Low-income Graduates.....	8
Conclusions from Existing Research	10
Chapter 3. Analysis of 2006 Central Texas Graduates' Postsecondary Decisions.....	15
Characteristics of Central Texas Graduates	15
Postsecondary Enrollment Data.....	19
Interpretation of Results.....	24
Chapter 4. Conclusions and Recommendations.....	28
Appendix.....	32
National Student Clearinghouse (NSC) Data Limitations	32
School and Student Selectivity Variable.....	34
Bibliography	37
Vita.....	40

Chapter 1. Introduction

The educational achievement gap in the United States' education system has been discussed for decades. Research has repeatedly shown that minority and low-income students are less likely to graduate from high school or attend and graduate college than their counterparts.¹ In 2000, 64% of the eighteen-year-old population was White, but made up 77% and 76% of the "college-ready" population and the entering college population, respectively.² In contrast, the percents of African-American and Hispanic students entering college were lower than the shares they represented of the overall eighteen-year-old population.³

While many programs focus on ensuring that minority and low-income students increase their success while in high school, it is no longer adequate to focus solely on comparing high school graduation and college attendance rates among student groups. The world is quickly evolving into one in which having a postsecondary education will soon be the minimum credential for competitive advancement in the workplace.

Is it still equitable for graduates to simply attend and complete college or should our focus shift to ensure that graduates attend universities for which they are most qualified? Assumedly, if these graduates attend the universities for which they are most qualified, the additional credentials would lead to a higher level of competitive qualifications. To answer this question, the current educational system's ability to provide equal levels of preparation for graduates regardless of race/ethnicity and income level must be ascertained. Then, it must be determined if students are pursuing further education at the institutions for which they are most qualified after graduating from high school. If the answer to either question is not affirmative, the achievement gap is persisting beyond high school graduation.

Problem Definition

The factors contributing to the achievement gap have resulted in more limited opportunities for certain segments of the population. To eliminate this gap, students must reach their academic potential beyond high school. The following hypotheses guide this work: 1) low-income and/or minority graduates qualify for top-tier postsecondary institutions at lower rates than their counterparts; and 2) low-income and/or minority graduates enroll in schools for which they are overqualified at higher rates due to a lack of awareness, resources, and connections (i.e. social capital). Consequently, these graduates may not be entering the workforce with the level of competencies and qualifications they could have achieved. The following sections detail the data used for this analysis and further explain the organization of the report.

Data Set for Analysis

The data for this report come from the Central Texas Student Futures Project, a research endeavor carried out by the Ray Marshall Center at the University of Texas at Austin. (For more information, please refer to <http://www.centexstudentfutures.org>.) This analysis relies on descriptive statistics for 2006 Central Texas high school graduates from four Central Texas independent school districts. The descriptive statistics are based on a research data set constructed from individual student high school records and postsecondary education records through December 2006. In addition, a student selectivity variable, to be described within this section, was also constructed for each graduate.

Historical School Records

In Texas, districts are required to report specific student, school, and district level data to the Texas Education Agency (TEA). These variables, which are submitted to the Public Education Information Management System (PEIMS), are consistent across districts and therefore facilitate the construction of the dataset. PEIMS variables – race/ethnicity, gender, low-income status, high school of

graduation, ACT/SAT score, and high school grade point average – were included for graduates in the sample.

Postsecondary Education Data

Student postsecondary data was gathered from several sources. The first source was the National Student Clearinghouse (NSC), which provides directory information from over 3,000 participating institutions nationwide and includes information on student dates of enrollment, location, name, type of institution, and whether degrees were awarded. Not all postsecondary institutions participate in NSC data collection so this data base was supplemented with directory information from the University of Texas at Austin and the University of North Texas. The appendix provides a complete list of Texas institutions not included in the NSC database.

Student Selectivity Variable

The student selectivity variable is based on the qualifications listed by the *2009 Barron's Profiles of American Colleges*⁴ and adapted from similar research.⁵ Each graduate was assigned a “student selectivity” rating based on a qualifications rubric that identifies the type and selectivity of postsecondary institution he/she would be qualified for based on SAT/ACT scores and final grade point average (Table 1.1). The rubric is based on the guidelines detailed in the *Barron's* guide, with slight modifications. Level 1 qualifications represent graduates who would not qualify for any four-year institution, but would qualify for a two-year institution. Level 2 represents those graduates who would qualify for enrollment at non-selective 4-year institutions. Levels 3, 4 and 5 represent those graduates who qualify for 4-year institutions with increasing levels of selectivity, with Level 5 representing graduates who are qualified for the most selective universities. The appendix offers a full description of how the rubric was developed as well as the school selectivity rating of several of the commonly attended institutions in Texas.

Table 1.1
Student Selectivity Variable Rubric

Average SAT/ Total ACT Score	Grade Point Average				
	<2.0	2.0 – 2.49	2.5 – 2.99	3.0 – 3.49	3.5 – 4.0+
Missing Score	Level 1	Level 2	Level 3	Level 3	Level 4
<500	Level 1	Level 2	Level 3	Level 3	Level 4
<21	Level 1	Level 2	Level 3	Level 3	Level 4
500-572	Level 2	Level 3	Level 3	Level 4	Level 4
21-23	Level 2	Level 3	Level 3	Level 4	Level 4
573 – 619	Level 3	Level 3	Level 4	Level 4	Level 4
24 – 26	Level 3	Level 3	Level 4	Level 4	Level 4
620 – 800	Level 3	Level 4	Level 4	Level 4	Level 5
27+	Level 3	Level 4	Level 4	Level 4	Level 5

Overview of Report

The following chapters present a literature review, data analysis, and recommendations. Chapter 2 focuses on the literature and research surrounding the effect of social capital on postsecondary transitions, with a focus on how a lack of social capital affects minority and low-income graduates. Chapter 3 analyzes the sample of 2006 Central Texas graduates and their respective postsecondary outcomes, both for all graduates and for subgroups of interest. The final chapter offers recommendations and conclusions based on this analysis.

Goals and Objective

The primary goal of this professional report is to better understand the decisions Central Texas graduates are currently making in regards to transitioning

from high school to postsecondary education. The report further aims to allow educational stakeholders to gain deeper insight into the parameters of graduates' decision-making process and what they can do to effect positive outcomes for all graduates in the region. Finally, the report hopes to add to the discussions policy makers and university officials have regarding the appropriateness of policies intended to improve graduates' decisions.

Notes

¹ U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008–031).

² Greene, Jay P. and Greg Forster. (2003). *Public High School Graduation and College Readiness Rates in the United States*. Education Work Paper No. 3. Online. Available: http://www.manhattan-institute.org/pdf/ewp_03.pdf. Accessed : April 20, 2009.

³ Greene, Jay P. and Greg Forster. (2003). *Public High School Graduation and College Readiness Rates in the United States*. Education Work Paper No. 3. Online. Available: http://www.manhattan-institute.org/pdf/ewp_03.pdf. Accessed : April 20, 2009.

⁴ Barron's Educational Series. (2009). *2009 Barron's Profiles of American Colleges, 28th edition, 2008*. Hauppauge: Barron's Educational Series, Inc.

⁵ Roderick, Melissa et al. (2008). *From High School to the Future: Potholes on the Road to College*. Online. Available: http://ccsr.uchicago.edu/publications/CCSR_Potholes_Report.pdf. Accessed: May 10, 2008.

Chapter 2. Literature Review

Defining Social Capital

In 2004, 69 percent of high school seniors nationwide expected to earn a bachelor's degree.⁶ Approximately 66 percent of graduates actually enrolled in a postsecondary institution that fall, which is arguably the first step to achieving their expectations.⁷ This transition, from graduation to enrollment, however, is not consistent across students' race/ethnicity or family income levels. The gap in enrollment between minority students and White students has fluctuated between six and 20 percentage points since 2000, with an even wider gap existing between the enrollment levels of students from the lowest and highest income levels.⁸ Some of this gap arguably stems from minority and low-income students suffering from a lack of resources (financial, educational, etc.) at the school level. A lack of social capital may also hinder highly qualified students from enrolling in postsecondary institutions.

While originating from the field of economics, the phrase "social capital" has become common in conversations around sociology, public policy, government and many other arenas. For this discussion, we will use McDonough's education-focused definition of social capital which is "that property that middle and upper class families transmit to their offspring, which substitutes for or supplements the transmission of economic capital as a means of maintaining class status and privilege across generations."⁹ It is important for one to recognize that a lack of these resources would have the opposite effect stated in McDonough's definition, marginalizing students who lack sufficient social capital.

Effects of Social Capital on Minority and Low-income Graduates

The following sections detail how a lack of social capital at both a family and school level adversely affects the college enrollment decisions of minority and low-income graduates.

Parental Involvement and Knowledge

Parents and immediate family arguably act as one of the most important sources of information for any student. Navigating the college preparation, application and decision process is daunting, but is likely less challenging for students whose parents attended college and thus have firsthand experience with these processes. It is important for students to view their parents as a quality source of information, since students who report that their parents are a source of college information are more likely to attend a four-year college than those who do not.¹⁰

Unfortunately, low-income and minority students, including those in the Central Texas area, are more likely to report lower levels of parental education when compared to White students.¹¹ From a national perspective, in 2006, 44 percent of White children had a parent who had completed a bachelor's degree while only 21 percent and 15 percent of Black and Hispanic children, respectively, could make the same claim.¹² Parental education level is also correlated with school involvement, another factor that can positively affect student outcomes.¹³

Students' lack of knowledge about the college application process is further manifested as students look outside their family for help. Low-income seniors in Central Texas are more likely than their counterparts to report school personnel (rather than parents) as most helpful when applying to college and applying for financial aid.¹⁴ However, not all students report that other sources outside their parents are helpful. Low-income students often receive lower levels of encouragement to attend college from their peers, school personnel, and extended family members.¹⁵ Lower levels of encouragement may lead low-income and

minority students to be significantly less likely to begin thinking about college as an option as young children.¹⁶

Many studies have also shown the importance of financial aid information and access for low-income and minority students. Some studies even claim that a lack of information about college costs and the availability of financial aid is the primary cause of lower enrollment rates for low-income and minority students.¹⁷ In the Student Futures Project's survey of Central Texas graduates, minority and low-income seniors are not only more likely to report needing financial aid, but are more likely to report not knowing about the financial aid process.¹⁸ Unfortunately, parental/family support also falls short in this area. Both low-income and Hispanic seniors are more likely than other seniors to report that no one in their family had attended a financial aid information event.¹⁹

School Effects

Many studies focus on school level factors that are more likely to lead to positive student outcomes, such as lower dropout rates and higher test scores. While these effects are being debated, factors of interest through the lens of race/ethnicity and income level can still be examined.

A myriad of factors may play a role in measuring the "quality" of a school. Studies have shown that school-specific factors (such as size, culture) can have strong effects on student outcomes such as college readiness and dropout rates. While some studies argue that education before kindergarten is responsible for much of the achievement gap, other researchers claim that the achievement gap between Black and White students expands with each year of schooling. Researchers found that the most marked differences existed between schools rather than within them.²⁰ Furthermore, one study found that unequal distributions of inexperienced teachers and racial concentrations within schools can explain all of the increased achievement gap for students advancing from third grade through eighth grade.²¹ This situation is further reinforced as low-income and minority children nationwide are more likely to

be in a classroom with an inexperienced teacher.²² After years of instruction from inexperienced teachers, these students may graduate less qualified for postsecondary instruction than their counterparts. These teachers may also be less reliable resources for students who need assistance navigating the college application and decision-making process.

Many studies have shown that no school personnel play a more important role in increasing college enrollment than counselors.²³ Counselors' recommendations make a difference in where students plan to attend college.²⁴ Additionally, meeting frequently with a counselor about college aspirations and steps toward attending has been found to increase students' odds of enrolling in college.²⁵ Unfortunately, schools that serve mostly low-income and/or minority students often struggle to staff counselor positions, leading to a further decline in the resources available to these students.²⁶

This gap between the number of students graduating from high school and those enrolling in postsecondary institutions also manifests itself in the culture of the school itself. A school that exhibits a strong "college-going" culture can act as an agent of social capital for students; however, it is a challenge to create this culture within schools with a high percentage of minority and low-income students.²⁷ Social capital comes from experience and knowledge: without that built inherently into the staff members and student body, it can be extremely difficult to "create." Further, social networks of support (i.e., counselors, teachers, peers) within high-poverty, high-minority schools have been found to be insufficient in helping samples of Hispanic seniors navigate the college decision-making and planning process.²⁸

Conclusions from Existing Research

After reading through the conclusions of previous research, it is difficult to believe any low-income and minority students are able to overcome these disparities and attend postsecondary institutions. While researchers have begun to identify the

vital aspects of social capital and work with students to build their own knowledge, too many students are still left without an adequate conduit of social capital. The next chapter will analyze a sample of 2006 Central Texas graduates to examine whether there are differences between low-income and minority graduates and their peers in terms of college preparedness and matriculation.

Notes

⁶ Rooney, Patrick et al. U.S. Department of Education, National Center for Education Statistics. (2006). *The Condition of Education 2006*. (NCES 2006071).

⁷ Planty, Michael et al. U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008031).

⁸ Planty, Michael et al. U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008031).

⁹ McDonough, P.M. (1997). *Choosing Colleges: How Social Class and Schools Structure Opportunity*. Albany: State University of New York Press.

¹⁰ King, Jacqueline E. College Entrance Examination Board. (1996). *Improving the Odds: Factors that Increase the Likelihood of Four-Year College Attendance Among High School Seniors*. (CB 96-2). Online. Available:
<http://professionals.collegeboard.com/profdownload/pdf/RR%2096-2.PDF>.
Accessed: December 16, 2008.

¹¹ Smith, Tara Carter et al. Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. (2009). *Findings from the 2008 Senior Surveys*. Online. Available:
http://www.centexstudentfutures.org/pubs/Survey_Report_March2_2009.pdf.
Accessed : March 9, 2009.

¹² Planty, Michael et al. U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008031).

¹³ Kaplan, D. S. et al. (2000). *Family Structure and Parental Involvement in the Intergenerational Parallelism of School Adversity*. *Journal of Educational Research*, 93.

¹⁴ Smith, Tara Carter et al. Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. (2009). *Findings from the 2008 Senior Surveys*. Online. Available:
http://www.centexstudentfutures.org/pubs/Survey_Report_March2_2009.pdf.
Accessed : March 9, 2009.

¹⁵ McSwain, Courtney and Ryan Davis. Institute for Higher Education Policy. (2007). *College Access for the Working Poor: Overcoming Burdens to Succeed in*

Higher Education. Online. Available:

<http://www.ihep.org/assets/files/publications/a-f/CollegeAccessWorkingPoor.pdf>.

Accessed : January 31, 2009.

¹⁶ Schexnayder, Deanna et al. (2007). Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. *Findings from the 2006 Senior Surveys*. Online. Available:

http://www.utexas.edu/research/cshr/index.php?option=com_content&task=view&id=18&Itemid=34. Accessed : January 31, 2009.

¹⁷ St. John, Edward. (2005). *Refinancing the College dream: Access, Equal Opportunity and Justice for Taxpayers*. Baltimore: Johns Hopkins University Press.

¹⁸ Smith, Tara Carter et al. (2009). Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. *Findings from the 2008 Senior Surveys*. Online. Available:

http://www.centexstudentfutures.org/pubs/Survey_Report_March2_2009.pdf.

Accessed : March 9, 2009.

¹⁹ Smith, Tara Carter et al. (2009). Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. *Findings from the 2008 Senior Surveys*. Online. Available:

http://www.centexstudentfutures.org/pubs/Survey_Report_March2_2009.pdf.

Accessed : March 9, 2009.

²⁰ Hanushek, Eric A. and Steven G. Rivkin. (2006). *School Quality and the Black-White Achievement Gap*. (NBER Working Paper No. W12651). Online. Available:

<http://ssrn.com/id=940600>. Accessed: January 31, 2009.

²¹ Hanushek, Eric A. and Steven G. Rivkin. (2006). *School Quality and the Black-White Achievement Gap*. (NBER Working Paper No. W12651). Online. Available:

<http://ssrn.com/id=940600>. Accessed: January 31, 2009.

²² Ingersoll, Richard. (2002). Center for the Study of Teaching and Policy, The University of Washington. *Out-of-Field Teaching, Educational Inequality, and the Organization of Schools: An Exploratory Analysis*. Online. Available:

http://www.cpre.org/images/stories/cpre_pdfs/OutOfField-RI-01-2002.pdf.

Accessed : March 9, 2009.

²³ McDonough, P.M. (1999). *The School-to-College Transition: Challenges and Prospects*. Washington, DC: American Council on Education, Center for Policy Analysis.

²⁴ King, Jacqueline E. (1996). College Entrance Examination Board. *Improving the Odds: Factors that Increase the Likelihood of Four-Year College Attendance Among High School Seniors*. (CB 96-2). Online. Available:
<http://professionals.collegeboard.com/profdownload/pdf/RR%2096-2.PDF>.
Accessed: December 16, 2008.

²⁵ McDonough, P.M. (1999). *The School-to-College Transition: Challenges and Prospects*. Washington, DC: American Council on Education, Center for Policy Analysis.

²⁶ McDonough, P.M. (2005). National Association for College Admission Counseling. *Counseling and College Counseling in America's Schools*. Online. Available:
http://www.nacacnet.org/PublicationsResources/Research/Documents/WhitePaper_McDonough.pdf. Accessed : March 9, 2009.

²⁷ Corwin, Zoe Blumberg and William G. Tierney. (2007). USC Center for Higher Education Policy Analysis. *Getting There – and Beyond: Building a Culture of College-going in High Schools*. Online. Available:
http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/34/e6/6e.pdf. Accessed : March 9, 2009.

²⁸ Ceja, Miguel. (2000). *Making Decisions about College: Understanding the Information Sources of Chicana Students*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Sacramento, CA. Online. Available:
http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/16/c1/c0.pdf. Accessed : December 18, 2008.

Chapter 3. Analysis of 2006 Central Texas Graduates' Postsecondary Decisions

This chapter analyzes the hypotheses posed in Chapter 1 to determine their accuracy. First, the demographic information, including selectivity ratings for all 2006 Central Texas graduates included in the sample, is presented to offer context and to summarize graduates' qualifications. Then, the data are analyzed to see if a majority of graduates are attending a college/university for which they are best qualified. Finally, the second hypothesis is tested by disaggregating the population to see if differences exist in enrollment choices between key subgroups of graduates.

Characteristics of Central Texas Graduates

A total of 5,805 Central Texas graduates from the Class of 2006 are included in the data sample.¹ The graduates represent four Central Texas independent school districts, but differences between districts are not the focus of this analysis. Demographic characteristics for the sample are shown in Table 3.1. Approximately half of the sample consists of White graduates, while 30 percent are Hispanic, 11 percent are Black and 5 percent are Asian. One-fourth of sample members come from low-income families, while the remaining three-fourths do not.² The sample is equally divided between male and female graduates.

¹ In *Outcomes One Year Later: An Update on the Class of 2006* (Beck & Cumpton, 2009) slightly different sample size/enrollment rates are reported. For this report, any students with a missing grade point average in his/her historical school records was dropped from the data set; thus leading to differences between the reported outcomes.

² Low-income graduates may be underrepresented in this sample as the basis for the low-income variable from historical school records requires students to self-identify and fill out paperwork for the free/reduced lunch program.

Table 3.1
Characteristics of 2006 Central Texas Graduates

	Total	Percent
	5,805	100%
<hr/>		
Ethnicity		
Asian	313	5%
Black	607	11%
Hispanic	1,757	30%
White	3,110	54%
Other	18	0%
<hr/>		
Gender		
Female	2,929	50%
Male	2,876	50%
<hr/>		
Economic Status		
Low-income	1,441	25%
Not low-income	4,364	75%

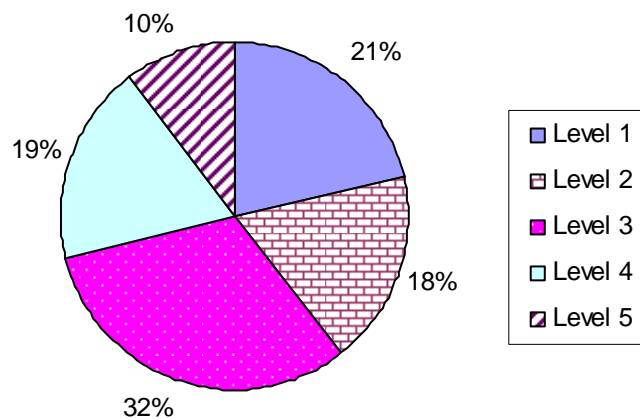
*Due to rounding, not all categories will sum to 100%

Source: Author's calculations from Student Futures Project data.

Student selectivity scores, which are based on average SAT/total ACT scores and GPA, as previously described in Chapter 1, were calculated for all graduates in the research data set. Figure 3.1 shows the student selectivity breakdown for the 2006 graduates. The largest share of graduates (32%) was classified as Level 3 on the selectivity scale. Ten percent of graduates were qualified for the most competitive

universities (Level 5) while 21 percent of graduates were only qualified for a two-year college (Level 1).

Figure 3.1
Student Selectivity for 2006 Central Texas Graduates



Source: Author's calculations from Student Futures Project data.

To test the first hypothesis, student selectivity was further broken down to examine differences between subgroups of graduates (Table 3.2). Larger shares of Black and Hispanic graduates have Level 1 and/or Level 2 qualifications than was true for Asian and White graduates. Lower shares of both Hispanic and Black graduates have Level 4 and/or Level 5 qualifications than is true for Asian and White graduates, thus indicating that these Black and Hispanic graduates are not qualified for enrollment in top-tier universities. Larger shares of low-income graduates also have Level 1 and Level 2 student selectivity scores, and fewer have Level 5 and Level 4 qualifications when compared to graduates from middle- and high-income families.

Table 3.2
Student Selectivity by Selected Demographics

	Total Graduates	Level of Student Selectivity				
		Level 1	Level 2	Level 3	Level 4	Level 5
Total	5,805	21%	18%	32%	19%	10%
Ethnicity						
Asian	313	11%	9%	31%	26%	23%
Black	607	38%	26%	27%	7%	2%
Hispanic	1,757	33%	24%	30%	9%	3%
White	3,110	13%	14%	34%	26%	14%
Other	18	22%	11%	28%	28%	11%
Gender						
Female	2,929	18%	17%	33%	21%	11%
Male	2,876	25%	19%	30%	16%	9%
Economic Status						
Low-income	1,441	36%	26%	30%	7%	2%
Not low-income	4,364	17%	15%	32%	23%	13%

Level 1 indicates graduates are qualified only for enrollment in two-year universities, while Level 5 indicates that graduates are qualified for the most selective universities.

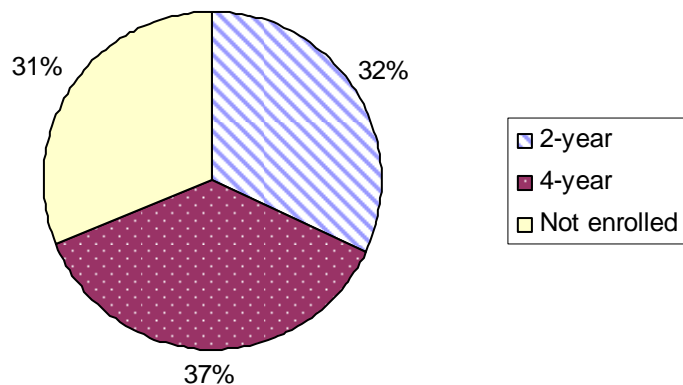
*Due to rounding, not all categories sum to 100%.

Source: Author's calculations from Student Futures Project data.

Postsecondary Enrollment Data

Of the 5,805 Central Texas students who graduated in the spring of 2006, 4,001 enrolled in a postsecondary institution in the following fall semester (69%) with slightly more enrolling at 4-year universities (37%) than 2-year colleges (32%). Thirty-one percent did not enroll in any postsecondary education in the fall semester following graduation (Figure 3.2).

Figure 3.2
Fall 2006 Enrollment Status for All Graduates



Source: Author's calculations from Student Futures Project data.

Enrollment varied widely – ranging from 49% to 77% – by key demographic characteristics (Table 3.3). Asian and White graduates enrolled at higher rates than Black and Hispanic graduates. Low-income graduates also enrolled at lower rates (49%) than graduates who were not from a low-income family (75%).

Table 3.3
Fall 2006 Enrollment Status by Graduate Demographics

	Number of Enrolled Graduates	Percent Enrolled as a share of All Graduates
Total	4,001	69%
<hr/> Ethnicity		
Asian	233	74%
Black	392	65%
Hispanic	956	54%
White	2,409	77%
Other	12	67%
<hr/> Gender		
Female	2,074	71%
Male	1,927	67%
<hr/> Economic Status		
Low-income	709	49%
Not low-income	3,292	75%

Source: Author's calculations from Students Futures Project data.

Overall enrollment varies widely by both student selectivity level and the school selectivity level (Table 3.4). As stated earlier, 31 percent of the graduates did not enroll in a postsecondary institution in the fall directly after graduation. A strong association exists between student selectivity level and the rate of college enrollment;

in general, the share of graduates enrolled increases as the student selectivity level increases. In addition, the share of students found at a school whose selectivity matches their own (“match school”) is set out in boldface and shaded for each level of selectivity in Table 3.4. Overall, the largest share of graduates enrolled at Level 1 institutions (two year colleges - 30%) with the next largest shares enrolled at Level 5 institutions (most selective - 16%) and Level 3 institutions (selective - 12%).

Table 3.4
Enrollment Rate by Student Selectivity

	Total Graduates	Percent Enrolled	Selectivity of Actual School Enrolled				
			Level 1	Level 2	Level 3	Level 4	Level 5
Total	5,805	69%	30%	7%	12%	4%	16%
<hr/>							
Student Selectivity							
Level 1	1,247	43%	35%	4%	2%	0%	1%
Level 2	1,037	61%	41%	9%	8%	1%	2%
Level 3	1,849	77%	33%	10%	18%	4%	12%
Level 4	1,080	87%	20%	8%	22%	8%	29%
Level 5	592	80%	10%	2%	6%	6%	55%

*Due to rounding, not all categories will sum to 100%

Source: Author’s calculations from Student Futures Project data.

Out of the 4,001 enrolled graduates, nearly half (48%) enrolled at a college/university for which they were overqualified as defined by both their student selectivity score and the selectivity of the actual institution in which they enrolled

(Table 3.5). Thirty-two percent of all graduates enrolled in a school which matched their levels of qualifications, and 21 percent were attending an institution for which they were underqualified. Higher shares of both Level 1 and Level 5 graduates were found at schools that matched their qualifications when compared to other graduates, 83% and 68% respectively. Level 2 graduates were most likely to be found at an institution for which they were overqualified (67%). This indicates that these graduates with Level 2 qualifications chose to enroll in a 2-year college rather than in a nonselective 4-year institution. Level 4 graduates were most likely to be at an institution for which they were underqualified (34%). This indicates that these graduates were able to stretch and attend a Level 5 institution despite slightly lower than average enrollment qualifications.

Table 3.5
Qualification Differences for Enrolled Graduates

	Enrolled Graduates	Overqualified	Qualified	Underqualified
Total	4,001	48%	32%	21%
<hr/> Student Selectivity				
Level 1	530	0%	83%	17%
Level 2	629	67%	15%	18%
Level 3	1,426	55%	23%	22%
Level 4	940	58%	9%	34%
Level 5	476	32%	68%	0%

*Due to rounding, not all categories will sum to 100%.

Source: Author's calculations from Student Futures Project data.

The second hypothesis was that minority and low-income students would be less likely to attend a postsecondary institution for which they were qualified, or a match school, due to a lack of social capital. In examination, the only major difference between student subgroups was seen when comparing Black graduates to graduates of other race/ethnic groups (Table 3.6). Only 38% of Black graduates enrolled in institutions for which they were overqualified, the lowest of all race/ethnic groups. In addition, 37% of Black graduates enrolled at a school which matched their qualifications, the highest of all race/ethnic groups. No other major differences were seen across demographic groups.

Table 3.6
Qualification Differences for Enrolled Graduates, by Selected Demographics

	Enrolled Graduates	Overqualified	Qualified	Underqualified
Total	4,001	48%	32%	21%
<hr/>				
Ethnicity				
Asian	232	48%	28%	24%
Black	392	38%	37%	25%
Hispanic	956	48%	32%	20%
White	2,409	49%	31%	20%
Other	12	42%	17%	42%
<hr/>				
Gender				
Female	2,074	48%	31%	22%
Male	1,927	47%	33%	20%
<hr/>				
Economic Status				
Low-income	709	46%	32%	22%
Not low-income	3,292	48%	31%	21%

*Due to rounding, not all categories will sum to 100%.

Source: Author's calculations from Student Futures Project data.

Interpretation of Results

The hypothesis stated that qualification levels would be different between graduates of different races and different levels of family income. When examining

Table 3.2, it is distressing, though not shocking to note that Asian and White graduates have higher rates of Level 5 qualifications than Black and Hispanic graduates. In this respect, Central Texas graduates mirror the findings from other studies that show Black and Hispanic graduates leave high school with lower levels of college preparation than either White and/or Asian graduates.²⁹ Additionally, low-income graduates also leave high school with lower qualifications than graduates from middle or upper-income families. Again, findings related to income are consistent with prior research.³⁰³¹ When looking at actual enrollment figures, Black and Hispanic graduates enroll at lower rates compared to White and Asian graduates, and low-income graduates enroll at lower rates compared to graduates not from a low-income family.

In response to the second hypothesis, the data shows that overall enrollment is highly associated with the graduates' qualifications. As seen in Table 3.4, the largest share of graduates who chose not to enroll were those who graduated with Level 1 and Level 2 qualifications. The association, however, is not perfect as the proportion of graduates not enrolled was actually larger for Level 5 graduates than for Level 4 graduates. While students with Level 5 qualifications may have other opportunities which do not necessitate immediate college enrollment, the high rate of non-enrollment for these highly qualified graduates is definitely a point of interest for future research. Finally, Table 3.6 shows that there are few discernible differences among race/ethnic groups and/or between students of different income levels when it comes to the rates of enrollment at schools that match their qualifications. Thus, the results of this analysis do not support the author's second hypothesis.

Notes

²⁹ Greene, Jay P. and Marcus Winters. (2005). Center for Civic Innovation at the Manhattan Institute. *Public High School Graduation and College Readiness Rates: 1991 – 2002*. Online. Available: http://www.manhattan-institute.org/pdf/ewp_08.pdf. Accessed: March 11, 2008.

³⁰ Berkner, Lutz and Lisa Chavez. (1997). U.S. Department of Education, National Center for Education Statistics. *Access to Postsecondary Education for the 1992 High School Graduates*. (NCES 98105).

³¹ Greene, Jay P. and Greg Forster. (2003). Center for Civic Innovation at the Manhattan Institute. *Public High School Graduation and College Readiness Rates*. Online. Available: http://www.manhattan-institute.org/pdf/ewp_03.pdf. Accessed: March 11, 2008.

Chapter 4. Conclusions and Recommendations

As stated in the first chapter, the primary goal of this report is to gain insight into the decisions Central Texas graduates are currently making. In the context of this analysis, it seems that Central Texas graduates as a whole are currently making educational choices which are not entirely aligned with their qualifications upon leaving high school. While this analysis provides some insight into the decisions graduates are making, additional questions are raised in light of the intriguing results. The first question that needs more research is why more students are not attending postsecondary institutions that match their qualifications. It is potentially a huge loss for communities if graduates are not maximizing their talents beyond high school. The author has offered the potential theory that a lack of social capital limits the opportunities to which low-income and minorities may aspire. Previous research indicates that these groups suffer from lower levels of social capital. However, the author's analysis did not show that these groups were more likely than other graduates to attend colleges for which they were overqualified. However, there may still be a correlation between students' lack of social capital and the qualifications of minority and low-income students upon graduation.

Many of the results of this analysis call for additional research to further explain the differences between subgroups. It was previously highlighted that social capital may play a part in students' qualifications upon high school graduation. Table 3.4 and Table 3.5 raise related questions. First, one may wonder why 48 percent of enrolled graduates are choosing to attend an institution for which they are overqualified. What other factors go into the college enrollment decision-making process that are swaying graduates to attend less competitive universities? Furthermore, what ramifications does this have on the larger picture of workforce competencies – is it possible our general workforce would be more competitive and qualified if all graduates attended a “match school?”

Additionally, the differences observed across student selectivity levels require more research. Graduates with Level 1, Level 2, and Level 3 qualifications all enroll at 2-year universities at higher rates than that of any type of university. Why would a Level 3 graduate who is qualified for a selective 4-year university choose instead to attend a 2-year college? Finally why would graduates with the highest level of qualifications (student selectivity scores of 4 and 5) choose not to enroll at all? Unfortunately, a large share of our potential talent may not be optimally utilized in the workforce.

The second aim of this report is to add more information to the conversation among policy makers regarding the appropriateness of policies intended to positively affect graduates' postsecondary decisions. A similar study performed with Chicago Public School seniors found that only approximately one-third enrolled in an institution which met or exceeded their qualifications.³² In comparison, this sample of Central Texas graduates found that 52 percent of enrolled graduates were in institutions which matched or exceeded their qualifications.³ While these data cannot be exactly compared, it is worth contrasting the districts' existing policies that may be causing more graduates to attend a "match school." Further longitudinal studies may also explore the consequences of having more graduates attend a "match school." Which public policies are contributing to these decisions and what may be the ramifications if graduates do not attend a "match school?" Additionally, support for additional research is a must. With so many unanswered questions that could potentially have a huge effect on the results of any policy, policymakers must be equipped with the information to ensure their decisions result in the intended effects.

³ The percentages associated with the Chicago report are from a sample of seniors who reported that they "aspired" to completing a 4-year degree. The percentages for this study are from graduates who have enrolled in postsecondary education and thus the percentages are not perfect comparisons; rather they are merely provided here to offer additional context/comparison.

Notes

³² Roderick, Melissa et. al. (2008). *From High School to the Future: Potholes on the Road to College*. Online. Available: http://ccsr.uchicago.edu/publications/CCSR_Potholes_Report.pdf. Accessed : May 10, 2008.

Appendix

The following sections include more detailed information on several of the topics included in the main text.

National Student Clearinghouse (NSC) Data Limitations

NSC data are based on directory information from participating colleges nationwide. However, not all Texas postsecondary institutions are included in this database. Supplemental directory information is gathered directly from the two largest Texas postsecondary institutions not included, the University of Texas at Austin and the University of North Texas. Ray Marshall Center researchers use directory information provided directly from these schools' respective registrars. Additional Texas postsecondary institutions that are not included in the NSC database are reported in the following table.

Postsecondary Institution	Approximate Enrollment
South Texas College	17,000
Laredo Community College	9,000
Texas A&M University – Corpus Christi	8,000
Lee College	6,000
Angelina College	5,000
Texarkana College	4,000
Paris Junior College	4,000
Alvin Community College	4,000
University of Dallas	3,000
Texas Wesleyan University	3,000
Northeast Texas Community College	2,000
Lamar State College – Port Arthur	2,000
Galveston College	2,000
Remington College – Dallas Campus	2,000
Lama State College – Orange	2,000
Lubbock Christian University	2,000
Dallas Theological Seminary	2,000
Panola College	2,000
The Art Institute of Houston	2,000
College of Biblical Studies – Houston	1,500
The Art Institute of Dallas	1,500
Frank Phillips College	1,500
Western Technical Institute	1,500
Wheeler Institute of Texas	1,500

School and Student Selectivity Variable

The school selectivity variable was derived from the *2009 Barron's Profiles of American Colleges*. This college rating system assigns postsecondary institutions a rate from “most competitive” to “noncompetitive.”⁴ The ratings are based on entrance examination scores (SAT/ACT), high school rank, and grade point averages for the freshman class. These rankings were slightly modified to construct the “levels” used throughout the report. The following chart summarizes these changes as well as provides examples of each level of institution.

⁴ Certain “special” institutions that focus on specialized programs of study (music, art, etc.) are not specifically given a rating. Three graduates in the research sample attended a special unranked institution and were subsequently dropped from the dataset.

Level definition used for this report	Barron's Rating	Barron's Admissions Definition	Examples
Level 5	Most Competitive	<ul style="list-style-type: none"> ▪ A to B+ GPA ▪ 655 – 800 SAT ▪ 29+ ACT 	Rice University, Yale University, University of North Carolina at Chapel Hill
	Highly Competitive	<ul style="list-style-type: none"> ▪ B+ to B GPA ▪ 620 – 654 SAT ▪ 27-28 ACT 	University of Texas at Austin, University of Michigan, Gonzaga University
Level 4	Very Competitive	<ul style="list-style-type: none"> ▪ B – or greater GPA ▪ 573 – 619 SAT ▪ 24 – 26 ACT 	Abilene Christian University, St. Edward's University, Auburn University
Level 3	Competitive	<ul style="list-style-type: none"> ▪ C or greater GPA ▪ 500 – 572 SAT ▪ 21 – 23 ACT 	Concordia University at Austin, Sam Houston State University, Arkansas State University,
Level 2	Less Competitive	<ul style="list-style-type: none"> ▪ C or lower GPA ▪ Below 500 SAT ▪ Below 21 ACT 	DeVry University, Lamar University, North Carolina Central University
	Non Competitive	No consistent admissions requirements, typically accept 98% or more of applicants	Angelo State University, University of Houston – Downtown, Shawnee State University
Level 1 (2-year institutions)	Not Rated	Not rated	Austin Community College, San Jose Community College

These modified Barron's ratings were utilized to assign a level to each school, but then also to assign each student a student selectivity level. This rubric was introduced in Chapter 1 and presented again here. Higher test scores were weighted slightly more heavily. In addition, when constructing the data set, any student with a missing grade point average was dropped from the sample.

Grade Point Average

SAT/ACT Score	<2.0	2.0 – 2.49	2.5 – 2.99	3.0 – 3.49	3.5 – 4.0+
Missing Score	Level 1	Level 2	Level 3	Level 3	Level 4
<500 <21	Level 1	Level 2	Level 3	Level 3	Level 4
500-572 21-23	Level 2	Level 3	Level 3	Level 4	Level 4
573 – 619 24 – 26	Level 3	Level 3	Level 4	Level 4	Level 4
620 – 800 27+	Level 3	Level 4	Level 4	Level 4	Level 5

Bibliography

Barron's Educational Series. (2009). *2009 Barron's Profiles of American Colleges, 28th edition, 2008*. Hauppauge: Barron's Educational Series, Inc.

Berkner, Lutz and Lisa Chavez. (1997). U.S. Department of Education, National Center for Education Statistics. *Access to Postsecondary Education for the 1992 High School Graduates*. (NCES 98105).

Ceja, Miguel. (2000). *Making Decisions about College: Understanding the Information Sources of Chicana Students*. Paper presented at the annual meeting of the Association for the Study of Higher Education, Sacramento, CA. Online.

Available:

http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/16/c1/c0.pdf. Accessed: December 18, 2008.

Corwin, Zoe Blumberg and William G. Tierney. (2007). USC Center for Higher Education Policy Analysis. *Getting There – and Beyond: Building a Culture of College-going in High Schools*. Online. Available:

http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/34/e6/6e.pdf. Accessed: March 9, 2009.

Greene, Jay P. and Greg Forster. (2003). *Public High School Graduation and College Readiness Rates in the United States*. Education Working Paper No. 3. Online.

Available: http://www.manhattan-institute.org/pdf/ewp_03.pdf. Accessed: April 20, 2009.

Greene, Jay P. and Marcus Winters. (2005). Center for Civic Innovation at the Manhattan Institute. *Public High School Graduation and College Readiness Rates: 1991 – 2002*. Online. Available:

http://www.manhattan-institute.org/pdf/ewp_08.pdf. Accessed: March 11, 2008.

Hanushek, Eric A. and Steven G. Rivkin. (2006). *School Quality and the Black-White Achievement Gap*. (NBER Working Paper No. W12651). Online. Available:

<http://ssrn.com/id=940600>. Accessed: January 31, 2009.

Ingersoll, Richard. (2002). Center for the Study of Teaching and Policy, The University of Washington. *Out-of-Field Teaching, Educational Inequality, and the Organization of Schools: An Exploratory Analysis*. Online. Available:

http://www.cpre.org/images/stories/cpre_pdfs/OutOfField-RI-01-2002.pdf.

Accessed: March 9, 2009.

- Kaplan, D. S. et al. (2000). *Family Structure and Parental Involvement in the Intergenerational Parallelism of School Adversity*. *Journal of Educational Research*, 93.
- King, Jacqueline E. College Entrance Examination Board. (1996). *Improving the Odds: Factors that Increase the Likelihood of Four-Year College Attendance Among High School Seniors*. (CB 96-2). Online. Available: <http://professionals.collegeboard.com/profdownload/pdf/RR%2096-2.PDF>. Accessed: December 16, 2008.
- McDonough, P.M. (1997). *Choosing Colleges: How Social Class and Schools Structure Opportunity*. Albany: State University of New York Press.
- McDonough, P.M. (1999). *The School-to-College Transition: Challenges and Prospects*. Washington, DC: American Council on Education, Center for Policy Analysis.
- McDonough, P.M. (2005). National Association for College Admission Counseling. *Counseling and College Counseling in America's Schools*. Online. Available: http://www.nacacnet.org/PublicationsResources/Research/Documents/WhitePaper_McDonough.pdf. Accessed: March 9, 2009.
- McSwain, Courtney and Ryan Davis. Institute for Higher Education Policy. (2007). *College Access for the Working Poor: Overcoming Burdens to Succeed in Higher Education*. Online. Available: <http://www.ihep.org/assets/files/publications/a-f/CollegeAccessWorkingPoor.pdf>. Accessed: January 31, 2009.
- Planty, Michael et al. U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008031).
- Roderick, Melissa et al. (2008). *From High School to the Future: Potholes on the Road to College*. Online. Available: http://ccsr.uchicago.edu/publications/CCSR_Potholes_Report.pdf. Accessed: May 10, 2008.
- Rooney, Patrick et al. U.S. Department of Education, National Center for Education Statistics. (2006). *The Condition of Education 2006*. (NCES 2006071).
- Schexnayder, Deanna et al. (2007). Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. *Findings from the 2006 Senior Surveys*. Online. Available: http://www.utexas.edu/research/cshr/index.php?option=com_content&task=view&id=18&Itemid=34. Accessed: January 31, 2009.

Smith, Tara Carter et al. (2009). Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin. *Findings from the 2008 Senior Surveys*. Online. Available: http://www.centexstudentfutures.org/pubs/Survey_Report_March2_2009.pdf. Accessed: March 9, 2009.

St. John, Edward. (2005). *Refinancing the College dream: Access, Equal Opportunity and Justice for Taxpayers*. Baltimore: Johns Hopkins University Press.

U.S. Department of Education, National Center for Education Statistics. (2008). *The Condition of Education 2008*. (NCES 2008–031).

Vita

Nicole Marie Beck was born in Escanaba, Michigan, the daughter of Michael and Carol Beck. After graduating top of her class from Escanaba Area High School in 1999, she attended the University of Michigan. In April 2003, she received a degree of Bachelor of Science in Chemical Engineering. She then spent three years teaching science at Sharpstown High School in Houston, Texas as a corps member with Teach For America. In 2006, she entered the LBJ School of Public Affairs and the McCombs School of Business at the University of Texas at Austin as a dual-degree graduate student. Since 2007, she has also worked as the Henry and Bryna David Fellow at the Ray Marshall Center for the Study of Human Resources, specifically on the Central Texas Student Futures Project where she has co-authored several reports.

Permanent address: 5132 Hyde I.12 BLVD
Bark River, MI 49807

This report was typed by Nicole Marie Beck.

