ACHIEVING INCLUSIVENESS AND DIVERSITY IN DOCTORAL EDUCATION IN TEXAS: Praxis and Recommendations

Under the Supervision of the Graduate Education Advisory Committee

A Position Paper Authored by:
Adam G. Martinez
Texas A&M University-Corpus Christi

Texas Higher Education Coordinating Board
Division of Academic Affairs and Research
Graduate Education Advisory Committee

October 2008

Graduate Education Advisory Committee

Texas Higher Education Coordinating Board
Division for Academic Affairs and Research

Sandra Terrell
Committee Chair
University of North Texas

Mitchell Muehsam
Committee Vice-Chair
Sam Houston State University

Charles Ambler
The University of Texas at El Paso

Paul Brooke
Texas Tech University Health Sciences Center

Jeff Brown
Texas A&M International University

David S. Carlson
Texas A&M University System
Health Science Center

Philip G. Cohen
The University of Texas at Arlington

Mario Diaz
The University of Texas at Brownsville

Henry Flores
St. Mary's University

Darlene Grant
The University of Texas at Austin

Fred Hartmeister
Texas Tech University

Allan Headley
Texas A&M University-Commerce

Sam Hill
Texas A&M University-Corpus Christi

Larry Lyon
Baylor University

Marco Mariotto
University of Houston

Robert Nelsen
The University of Texas at Dallas

Alberto M. Olivares
Texas A&M University-Kingsville

William Parker
Prairie View A&M University

George Stancel
The University of Texas Health
Science Center at Houston

Nancy Street
The University of Texas Southwestern
Medical Center at Dallas

Bridget Walsh, Graduate Assistant
Texas Women's University

Robert C. Webb
Texas A&M University

Mike Willoughby
Texas State University-San Marcos

Susan Yarbrough
The University of Texas at Tyler

James Goeman
Texas Higher Education Coordinating Board

Acknowledgements

This report would not have been possible without the contributions of Adam Martinez, Joseph Stafford, Roger Alford, Kevin Lemoine, Cheryl Rosipal, Cynthia Valdez, Kathryn Raign, Michael Durrance, Diversity Officers at Texas public universities, and all past members of the Graduate Education Advisory Committee. Their hard work and dedication to equity in higher education is gratefully acknowledged.

Preface

Higher education contributes to creating an educated citizenry that is vital to a state's or region's economic and social well-being. The research nature of doctoral programs promotes innovations and new knowledge that stimulate economic and intellectual growth. No state can sustain prosperity if it does not utilize the brainpower of its citizens. In 2008, more than 50 years after the landmark Supreme Court decision of *Brown v. the Board of Education of Topeka,* there is perhaps no other level of public education in the State of Texas that continues to reflect vestiges of Texas' history in higher education than in doctoral programs in our public institutions.

As has been forecasted by state demographers, Texas is now a minority-majority state with Hispanics accounting for more than 40 percent of the state's population, African Americans representing 11 percent, and other diverse groups representing 4 percent. Thus, minority groups (including Asian Americans and Native Americans) now represent 55 percent of the state's population. By 2015, the population of Hispanic and African American Texans is expected to rise dramatically.

In spite of this current and projected population growth, the state's Hispanic and African American populations have enrolled in higher education and graduate school at rates well below that of the Caucasian population (THECB, 2004a; THECB 2007). African Americans and Hispanics receiving Ph.D.s in the state are highly underrepresented relative to their presence in the overall population of Texas: 5 percent vs. 11 percent and 7 percent versus 34 percent respectively in 2001 (THECB, 2004b). With this trend, current projections indicate that the absolute number of Ph.D.s awarded within the state will remain essentially constant over the next decade (THECB, 2004b). It is also projected that this will result in a 17 percent decrease of the proportion of the Texas labor force with a graduate or professional degree by the year 2040 (Murdock, 2002). Texas currently ranks 8th out of the 10 most populous states in the proportion of science and engineering doctorates in the workforce (NSF, 2007) and is below the national average for Ph.D.s awarded per capita, ranking 9th out of the 10 most populous states in number of Ph.D.s awarded per 100,000 population (NSF, 2006). The state cannot afford to continue to have a majority of its citizens not well represented in doctoral education.

Given the current gap, and potential for an even larger gap, among underrepresented groups in both enrollment and graduation from Texas colleges and universities, the Texas Higher Education Coordinating Board (THECB) approved *Closing the Gaps by 2015*. This plan is being implemented to ensure the accessibility and quality of higher education in Texas and to avert a future workforce

crisis that would have vital consequences for the economy and prosperity of the state and the nation (*CTG 201*5, p. 4). While *Closing the Gaps by 2015* offers some goals for doctoral programs, the plan mainly specifies annual targets and accountability measures for moving students from secondary schools into undergraduate programs, including those in the sciences, technology, engineering, and mathematics (STEM).

A 2004 THECB report on doctoral education in Texas provided recommendations to increase the number of African Americans and Hispanic doctoral graduates in Texas. This led to the formation of the Graduate Education Advisory Committee (GEAC) of the THECB to implement the report's recommendations. A result of the GEAC's work is this guide: *Achieving Inclusiveness and Diversity in Doctoral Education in Texas: Praxis and Recommendations*. The guide builds upon and extends *Closing the Gaps by 2015* by providing a historical and statistical context for best practices and specific actions for increasing diversity within research doctoral programs in general and in science, technology, engineering, and mathematics doctoral programs in particular among our state universities. Actions proposed in this guide can be considered and implemented by institutions—individually and collectively. Legislators will find this guide helpful in identification of laws and traditional state practices, such as the precluding waiver of tuition and fees for funded doctoral students, as is the practice among other states with major research universities.

Gains have been made in diversity in doctoral education since *Brown v. the Board of Education* of Topeka. However, such gains have not been enough to stave off the potential paucity of future professors, scientists, engineers, and leaders who reflect the proportion of the diverse population of the state. The inclusion of diverse people with differing backgrounds results in an infusion of diverse ideas and perspectives, which enhances and contributes to the quality of our state's doctoral programs and research. It is the hope of the members of GEAC that this guide can serve as a useful tool for enhancing the diversity of our doctoral programs and, in so doing, enhance the quality of our doctoral programs, research, and quality of life for Texas, the nation, and the world.

Sandra Terrell, Chair
Mitchell Muehsam, Vice Chair
Graduate Education Advisory Committee

Statements of Support

Demographic changes in the United States make it imperative for administrators, faculty, and governing boards to recognize the increasing importance of a broadly diverse pool of candidates for positions in higher education as well as in corporate leadership. Initiatives such as the KPMG Ph.D. Project and the SREB Doctoral Scholars Program address the need for support of graduate students, and every institution must improve ways to recruit, retain, and award graduate degrees to an increasingly diverse group of students if we are to retain the strength that has been the hallmark of American higher education.

Gretchen M. Bataille, President
University of North Texas

As presidents and CEOs of various institutions of higher education have come to realize, the search for Hispanic and other minority doctoral faculty is an expensive, challenging and frustrating experience. The inadequate pool of professionals with these types of degrees is present in almost every area one can think of, be it engineering, arts and sciences, education, agriculture, business, health-related professions, etc. Since Texas has a significant proportion of Hispanics in the higher education "pipeline," it stands to reason that as a state we are in a great strategic position to encourage and support Hispanic undergraduate students to pursue graduate degrees, especially those that would go into faculty and administrative positions at our institutions of higher education. However, this infusion will not occur without some significant intervention via collaborative ventures among higher educational institutions, the state's legislature, private foundations and organizations such as the Texas Higher Education Coordinating Board. It is not beyond our capacities and willingness to join together in a collaborative venture to create a "THECB Hispanic Doctoral Fellowship Program" that can serve as a catalyst for increasing the number of Hispanic doctoral graduates to fill our faculty and administrative vacancies. Our state's Higher Education Plan of *Closing the Gaps by 2015* is making a difference. Now, it is time to expand that plan to include post graduate degrees at the masters and doctoral levels.

Rumaldo Z. Juarez, President
Texas A&M University-Kingsville

Our contemporary American society has embedded, in education, politics, and business a few indispensable words. Collaboration and cooperation, together with all words whose prefixes include inter- or multi-, permeate both our practical and our theoretical approaches to understanding our environment and ourselves.

But diversity remains, by far, the broadest and most far-reaching concept. Where we learn and where we work must feature diversity—of persons and ideas—to offer the best possible experience, the best possible outcomes.

Graduate study, the intense scrutiny of a discipline, the process by which new information is discovered and shared, most assuredly requires a diverse, many-hued cast. Only when our ideas spring from a diverse pool of possibilities, only when our fellow workers embody lives very different from our own, can we hope that the thoughts shared and the work completed indeed represent our best.

Ray M. Keck III, President
Texas A&M International University

Texas higher education is on the cutting edge of the new American demographics. Nationally, the participation of Hispanics, African Americans and Native Americans in doctoral education remains persistently low, especially in the sciences and technology. Texas educational institutions need to take the lead in guaranteeing a pipeline of talented minority students in these fields by moving those students into high quality doctoral programs. We must, as a state and as a nation, ensure that this reservoir of talent contributes to the development of new knowledge and economic growth. We can't afford not to.

Diana Natalicio, President
The University of Texas at El Paso

As one of the nation's leading research universities, as well as one of its largest, The University of Texas at Austin is an established leader in inclusiveness in doctoral education. UT Austin currently ranks number one in the nation in the number of doctoral degrees awarded to Hispanics, and has recently ranked seventh in the total number awarded to minorities overall and tenth in the number awarded to African Americans. Our academic environment is enriched by this community of diverse scholars, and through this community, physically located at the crossroads of North America's diverse populations, UT Austin is well positioned to serve the global needs of the twenty-first century.

William Powers Jr., President
The University of Texas at Austin

For many years, the US has built its economic progress on the contributions of scholars from abroad who have come to be trained in our Ph.D. programs and then stayed as scientists, engineers and entrepreneurs. Increasingly, opportunities in China, India and Korea have expanded such that this influx of talent can no longer be counted upon to ensure the vigor of our technological society. We must, if we are to remain at the forefront of the world's economy, make a concerted effort to train our own populace to take its place at the technological forefront. That increasingly means achieving greater inclusiveness in our doctoral programs to ensure that the face of technology reflects the diversity of our nation. Women, African Americans, and Hispanics, long underrepresented at the highest levels of academic achievement, must be brought into the process, find mentors and role models, and be encouraged to overcome the hurdles of inadequate preparation and negative peer pressure. We have to seek and train talent among our own people; the rest of the world will not forever send us its best and brightest.

Myron Salamon, Dean
School of Natural Sciences & Mathematics
The University of Texas at Dallas

Executive Summary

The Texas Higher Education Coordinating Board (THECB) urges Texas institutions of higher education to become more inclusive of racial and other minorities among their doctoral student and faculty ranks. As Texas becomes increasingly a “majority-minority” state where Caucasians compose a plural minority of the population, its universities must embrace inclusiveness as a core value in planning curriculum, strategies, and long-term goals.

Texas has striven to include members of historically underrepresented groups into graduate education for many years. Although Texas´ graduate schools have attracted many students from other countries, the number of Caucasian students still far outweighs that of Texas´ minority population. As enrollment still falls short of being proportionate to the general population, Texas universities fail to take advantage of the state’s potential.

The Graduate Education Advisory Committee (GEAC) of the THECB offers this guide to help Texas embrace its racial diversity in higher education. This guide offers many suggestions on how to improve the university’s acceptance of various races and cultures. This will, in turn, help Texas to transition its best talent into graduate education and will improve the institutions holistically.

Table of Contents

Graduate Education Advisory Committee Members i
Acknowledgements ii
Statements of Support iv
Executive Summary vii
Table of Contents viii
Purpose 1
A Long-Term Plan 2
Defining Inclusiveness 3
National Trends in Graduate Education 3
Part One: The Development of Inclusiveness in Texas 5
Doctoral Education in Texas: A Status Report 7
Degree Attainment by Discipline 9
Part Two: Creating an Environment of Inclusiveness: Best Practices 11
Stage One: Open the Door to Inclusiveness 14
Stage Two: Engage Your Institution 15
Stage Three: Mentor the Mentors 15
Stage Four: Produce Exemplary Colleagues 16
Conclusion 17
References 18
Appendices 23

Achieving Inclusiveness and Diversity in Doctoral Education in Texas: A Practical Guide

> "The Council of Graduate Schools (CGS) anticipates that graduate students will work in a rapidly changing world where "race, gender, ethnicity, nationality, and related factors merge with knowledge, merit, and talent to play important roles in shaping society. Their ability to deal with differing ideas and viewpoints will enable them to interact effectively with people in all sectors of society throughout the world" (Statement of Principles).

A spirit of inclusiveness and diversity must be integral in our policy making, implementation, evaluation, and accountability. For purposes of this report, the terms *inclusiveness* and *diversity* both address inclusiveness in doctoral education in Texas while also addressing the need to increase the representation of historically underrepresented groups in doctoral programs. Demonstrating diversity, however, merely as a number or percentage of institutional make-up fails to define or demonstrate inclusiveness.

Purpose

The purpose of *Closing the Gaps by 2015*, developed by the Texas Higher Education Coordinating Board (THECB), is to recognize the value of diversity and the ethical and legal obligation to provide opportunities for higher education to all citizens of Texas who may succeed in it.

This report, which is the first in a series, is intended to assist chancellors, university presidents, legislators, chief academic officers, graduate and college deans, and doctoral program faculty in understanding inclusiveness in doctoral education. It offers a range of strategies for achieving inclusiveness and diversity in research doctorate programs in Texas. The study also includes recommendations made to Coordinating Board staff by the Graduate Education Advisory Committee (GEAC) for promoting inclusiveness in doctoral education.

The goal of this report is to present various approaches to promoting and achieving inclusiveness in doctoral education in Texas—beyond race-based approaches to diversity—and to encourage the establishment of measures and accountability for creating, improving, evaluating, and cultivating inclusiveness at the highest levels of academia.

The guidelines and recommendations in this report build upon key aspects of the state's *Closing the Gaps by 2015* (2000), the two-part report on *Doctoral Education in Texas* (2004), and the *Strategic Plan for Doctoral Education in Texas* under development by the GEAC. Specifically, the recommendations (Part 3) developed in this report reflect the four priority areas of *Closing the Gaps*—Participation, Success, Excellence, and Research—as they relate to inclusiveness and diversity in research doctorate programs in Texas.

This report provides the following information:

- an updated report on the status of doctoral education in Texas
- research on best practices and guiding principles on inclusiveness in doctoral education
- initial recommendations to doctoral institutions for achieving inclusiveness and increasing the participation of historically underrepresented groups in doctoral education
- long-range strategies for promoting inclusiveness in doctoral education

This report is not intended to be a comprehensive study on inclusiveness or a detailed report on the overall status of doctoral-level education in Texas. However, the bibliography provides sources for further reading and research. Appendix A of this report includes a brief history of the development of equal educational opportunity in Texas.

Because Texas is a minority-majority state, where Caucasians are the minority of the population, this report uses *historically underrepresented groups* rather than *minorities* to identify racial groups who have struggled historically to find a place in Texas' higher education.

A Long-Term Plan

Texas needs a strategic long-range plan for doctoral education. While it is clear under federal law that race and ethnicity cannot be used as sole criteria for admission into educational programs, key questions remain for institutional and state leaders:

- How is our state to move within the freedom of our laws to still address the need for representation among African Americans and Hispanics in doctoral education or within specific disciplines such as sciences, engineering and mathematics?
- How do we increase the quality of the educational experience and academic preparation of African Americans, and Hispanics, and other underrepresented groups?

Recognizing inclusiveness as a core value serves as a starting point.

Defining Inclusiveness

The GEAC accepts the following definition of inclusiveness in doctoral education:

- seeking to understand the full range of cultures and values of our population and provide an environment in which our students may experience them
- making our programs available and affordable to all who are academically capable
- identifying and assisting capable individuals to enter and successfully complete graduate education programs, and
- encouraging openness to new ideas among our academic communities

In other words, inclusiveness is the bringing together of diverse individuals to engage in intellectual activities in such a way that graduate education "engenders respect for intellect, regardless of source, and builds a community whose members are judged by the quality of their ideas" (CGS, 2003, Statement of Principles).

Graduate schools that recognize inclusiveness as a core value must base admission to graduate school on the intellectual and creative capabilities of the students and their potential for advanced study. Institutions must continue to evaluate and improve how they assess graduate applicants. Universities must also retain the authority to select from among qualified applicants those "…who have the potential to bring new ideas and different perspectives to graduate education" (CGS, 2003, Statement of Principles).

Institutional practice and research, as well as basic human principles, affirm inclusiveness and diversity as values that benefit our society. Texas seeks to reflect this reality across all sectors of higher education in the state. The GEAC affirms that inclusiveness

- enriches the educational experience
- promotes personal growth and a healthy society
- strengthens communities and the workplace
- enhances our nation's economic competitiveness (ACE, 1998).

National Trends in Graduate Education

According to the 2006 report of the CGS, *Graduate Enrollment and Degrees: 1986 to 2005*, in 2005, African Americans were the largest historically underrepresented group among U.S. citizens, representing a 12% enrollment. Hispanics/Latinos were next with a 7% enrollment. Asian Americans and American Indians were 6% and 1%, respectively.

In 2005, the enrollment of international students showed a 2% increase since September 11, 2001. Non-U.S. citizens were concentrated primarily in the physical sciences and engineering fields (CGS, 2006, *Graduate Enrollment)* making it necessary for the students, faculty, and administration of these fields to enhance racial and ethnic understanding and inclusiveness.

The biological sciences, business, and social sciences also had substantial international student enrollment (CGS, 2006, *Graduate Enrollment*). In addition, the overall number of international students has grown by 3% on an average annual rate since 1986 in spite of a decline after the events of September 11, 2001.

The consistent 1% annual increase in overall enrollment in graduate education from 1986 to 2005 has been driven by "steady increases in the number of women and minority students" (CGS, 2006, *Graduate Enrollment*, p. 29). "One of the most notable trends in graduate education over the past 19 years has been the growth in the number of U.S. minority students pursuing graduate degrees. Enrollment by African American, American Indian, Asian, and Hispanic/Latino groups grew at an average annual rate between 4 and 6% between 1986 and 2005, while Caucasian enrollment was virtually unchanged" (CGS, 2006, *Graduate Enrollment*, p.29).

Between 1986 and 2005, Hispanics had the largest percentage growth (6%) in graduate enrollment, followed by African Americans and Asians (5%), and American Indians (4%), (CGS, 2006, *Graduate Enrollment*, p. 28). Among historically underrepresented groups, the largest graduate enrollment in 2005 was from African Americans, who also represented the largest percentage change (6%) from 2004 to 2005. All other groups experienced a 2% change from 2004 to 2005 according to the 2006 graduate enrollment report of the CGS.

For students enrolled for the first time in graduate education, the number increased by 2% annually between 1986 and 2005. The most dramatic growth in first-time enrollment in 2005 was among Hispanics, for whom enrollment increased by 10%, while Asian first-time enrollment decreased by 1% (CGS, 2006, *Graduate Enrollment*).

Enrollment for historically underrepresented graduate students has increased overall since 1990, but African Americans, Hispanics, and other groups continue to enroll below their representative share of the overall population at all levels of graduate education. In 1997, the CGS found African American and Hispanic enrollment in graduate education including master's, professional, and doctoral programs comprised 15% of total enrollment while Caucasians accounted for 80% (Syverson & Bagley, 1997, p. 10). As of 2005, these two groups comprised 19% of enrollment while Caucasians made up 74% (CGS, 2006, *Graduate Enrollment*, Table 1.5).

Part One: The Development of Inclusiveness in Texas

The following timeline represents the development of inclusiveness within Texas' graduate programs.

1978-1980—The U.S. Department of Education concludes that Texas "failed to eliminate the vestiges of its former *de jure* racially dual system of public higher education."

1983—Gov. William Clements develops the Texas Equal Educational Opportunity Plan for Public Higher Education— also known as the Texas Plan—to desegregate Texas higher education and involve more African American and Hispanic students.

1989—The South Texas/Border Initiative increases funding for border universities and upgrades five higher education institutions.

1994—Gov. Ann Richards creates *Access and Equity 2000*. This plan seeks to eliminate the differences among the African American, Hispanic, and the Caucasians amounts in

- undergraduate graduation rate
- number of graduate and professional school graduates
- number and proportion of faculty, administrators, and professional staff

The plan also seeks to increase the number of minorities and women on governing boards of Texas public institutions of higher education.

1996—The 5th Circuit's ruling in *Cheryl J. Hopwood, et al. v. State of Texas, et al.* raises concerns about the continuation of *Access & Equity 2000*, particularly with regard to the use of racial preferences by institutions to carry out the plan's goals. However, the THECB re-endorses the plan in January 1997.

2000--The THECB approves the *Closing the Gaps by 2015* higher education plan, principally to develop a performance system to determine institutional targets. For more information about state plans to improve equal access to higher education in Texas, see Appendix A.

Closing the Gaps focuses on four primary areas with overall goals (revised 2006) to be achieved by 2015. Though designed more explicitly for undergraduate programs, some of the objectives within the goals of *Closing the Gaps* can apply more specifically to doctoral education in Texas, and to the need for inclusiveness and diversity in higher education.

- **Participation**- Add 630,000 more students. The targets for this goal include increasing the participation rate for African Americans from 4.6% in 2000 to 5.7% by 2015, and increasing the participation rate of Hispanics from 3.7% in 2000 to 5.7% by 2015 (THECB, 2006, *Goals and Targets Summary*).

- **Success**- Award 210,000 undergraduate degrees, certificates, and other identifiable student successes from high quality programs. One of the targets for this goal includes increasing the number of students completing doctoral degrees to 3,350 by2010, and to 3,900 by 2015 (THECB, 2006, *Goals and Targets Summary*).

- **Excellence**- Increase the number of nationally recognized programs or services at colleges and universities. Establish ladders of excellence for different types of institutions and require each public college and university to identify one or more programs or services to improve to a level of nationally recognized excellence and prepare a strategic plan to accomplish this goal. Identify peer institutions for each public institution and establish excellence benchmarks (THECB, 2000).

- **Research**- Increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5% of obligations to higher education institutions across the nation.

Doctoral Education in Texas: A Status Report

This section examines enrollment data from the beginning of *Closing the Gaps* (2000), from the decade prior, and the data most currently available. Table 1 shows that while, by percentage, more minorities have enrolled in doctoral programs since 1990, far more Caucasians and International students enroll.

Table 1:
Percentage Change in Doctoral Enrollment and Attainment by Ethnicity at Texas Public Universities and Health Related Institutions (1990, 2000, 2006)

Enrollment

	Fall			% Change	
Ethnicity	**1990**	**2000**	**2006**	**1990-2000**	**2000-2006**
Caucasian	9,722	8,376	9,247	-13.8%	10.4%
African Am	504	615	1,159	22.0%	88.5%
Hispanic	527	945	1,694	79.3%	79.3%
Asian	393	535	910	36.1%	70.1%
International	4,180	4,427	6,968	5.9%	57.4%
Other	42	263	519	526.2%	97.3%
Statewide	**15,368**	**15,161**	**20,497**	**-1.3%**	**35.2%**

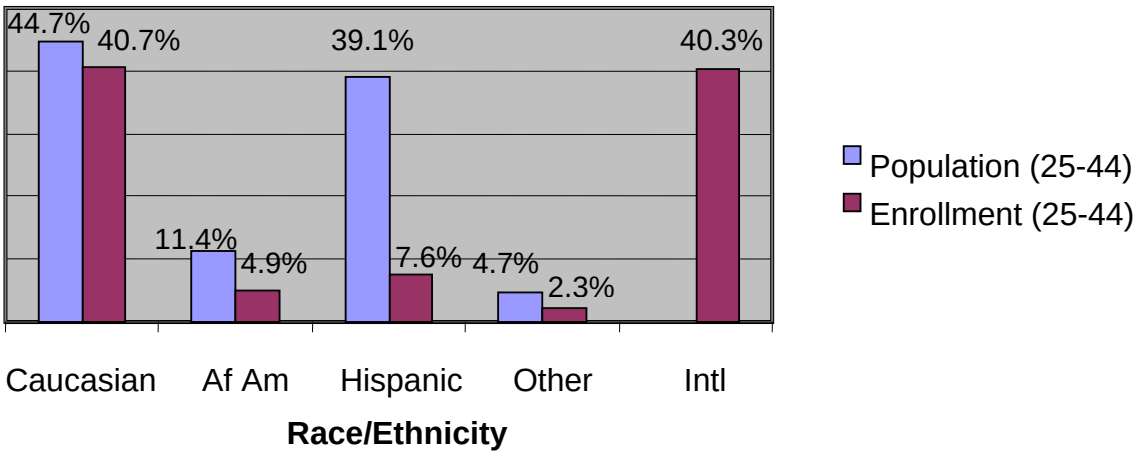
Attainment

	Fall			% Change	
Ethnicity	**1990**	**2000**	**2006**	**1990-2000**	**2000-2006**
Caucasian	1,264	1,307	1,249	3.4%	-4.4%
African Am	64	90	94	40.6%	4.4%
Hispanic	70	137	180	95.7%	31.4%
Asian	83	109	144	31.3%	32.1%
International	472	634	1,060	34.3%	67.2%
Other	12	20	53	66.7%	165.0%
Statewide	**1,965**	**2,297**	**2,780**	**16.9%**	**21.0%**

While many racial minorities were completing doctoral programs between 1990 and 2000, the completion rate since 2000 has declined although enrollment continues to increase.

Data from the THECB for 2005 were used to compare the enrollment rates of 25 to 44-year-olds to the general population of the same age group, by race/ethnicity. Figure 6 shows more clearly the proportional disparity between the doctoral enrollment of Caucasians and that of students from other races. Caucasians naturally have a far greater number of enrollees because they compose nearly half of the population in Texas. However, these data show a disparity of more than 5:1 for Hispanics, just over 2:1 for African Americans, and about 2:1 for others.

Table 2: Population Compared to Doctoral Enrollment by Race/Ethnicity in Texas (25-44 Age Group, 2005)



Sources: Texas State Data Center, 2005 Population Estimates, 2006; and THECB, 2007 THECB, CBM 001 Reports, Public Universities and HRIs.

Note: Enrollment in the Other category includes Asian Americans, Native Americans, Unknown, and all other race/ethnicities. Enrollment of International Students is separated out by the THECB. For purposes of the TSDC/OSD, International students living on or off campus are included in overall population so long as they are currently residing in Texas (TSDC/OSD, personal communication, June 14, 2007). The same is true of all other groups living in quarters such as nursing homes, military barracks, etc.

Degree Attainment by Discipline

Table 3 shows doctoral attainment broken down by race/ethnicity and discipline at public universities and health-related institutions in Texas 2006.

Table 3:
Doctoral Attainment By Race/Ethnicity within Disciplines at Public Universities and Health-Related Institutions (Texas, 2006)

FISCAL YEAR 2006							
Discipline	**Caucasian**	**Af Am**	**Hispanic**	**Asian**	**Intl**	**Other**	**Total**
Business	33.3%	2.4%	3.3%	4.1%	54.5%	2.4%	4.4%
	41	3	4	5	67	3	123
Education	62.5%	11.7%	14.3%	2.5%	7.1%	1.8%	15.6%
	272	51	62	11	31	8	435
Engineering	16.4%	0.6%	2.0%	6.0%	74.1%	1.0%	18.0%
	82	3	10	30	371	5	501
Health	51.7%	5.0%	7.5%	10.0%	24.2%	1.7%	4.3%
	62	6	9	12	29	2	120
Liberal, Fine Arts, Architecture	57.7%	1.7%	8.7%	4.9%	24.3%	2.6%	12.4%
	199	6	30	17	84	9	345
Psychology	79.0%	2.5%	8.0%	3.5%	4.5%	2.5%	7.2%
	158	5	16	7	9	5	200
Science and Math	35.7%	1.2%	4.1%	6.5%	50.5%	2.1%	27.3%
	271	9	31	49	383	16	759
Social Sciences	54.6%	5.0%	5.5%	3.7%	29.4%	1.8%	7.8%
	119	11	12	8	64	4	218
Agriculture	45.8%	0.0%	4.2%	6.3%	43.8%	0.0%	1.7%
	22	0	2	3	21	0	48
Other	74.2%	0.0%	12.9%	6.5%	3.2%	3.2%	1.1%
	23	0	4	2	1	1	31
Statewide	**44.9%**	**3.4%**	**6.5%**	**5.2%**	**38.1%**	**1.9%**	
	1,249	**94**	**180**	**144**	**1,060**	**53**	**2,780**

Source: THECB, CBM 009 Reports. THECB, 2007

Caucasian students obtain more doctorates than any other ethnic group, but they trade off with international students for the majority within each discipline. International students lead Caucasians in business (54.5%), engineering (74.1%), and science and math (50.4%) and nearly equal them in agricultural doctorates (43.8% to 45.8%).

Caucasian students hold a firm majority in the other disciplines, earning well over half the degrees in most. The largest disparities lie in engineering and agriculture, where African Americans, Asians, Hispanics, and other ethnicities combine to make only about 10% in each discipline.

Part Two:
Creating an Environment of Inclusiveness: Best Practices

This section intends to answer the following questions so Texas can improve institutional policies and practices that promote inclusiveness and increase the presence of qualified African American, Hispanic, and other historically underrepresented groups in doctoral education.

1. What are some of the common characteristics or principles that have distinguished successful initiatives or best practices in promoting inclusiveness and greater diversity?
2. What are some of the activities or traits that have helped develop these basic characteristics?
3. Why are these traits important?

Issues related to inclusiveness and diversity are complex. As such, institutions require a multifaceted approach that considers multiple strategies for achieving a culturally pluralistic academic community. According to the Center for Higher Education Policy Analysis (CHEPA), "higher education ought not to differ from the rest of American society: those who participate in postsecondary education should reflect the demographic changes that are occurring in the United States... Given that doctoral education is the primary training ground for future faculty, graduate programs should…also prepare future faculty leaders for work in more diverse institutions of higher education" (2004, p. 1).

In a nation where states' efforts have been negatively impacted by national debate on affirmative action (Welsh, 2004), Texas is one of a few states that has taken broad and formal steps to close the gap in access and achievement in higher education. Texas, however, should continue to do more, particularly to improve the participation and achievement of African Americans and Hispanics. Together, African Americans and Hispanics represent about 55% of Texas' population between 15 to 34 years old, but comprise only approximately 36% of the students in higher education across all educational levels.

To be diverse in student population does not mean that we have achieved the ideal level of inclusiveness to benefit the well-being of our state. Regardless of which program or programs a doctoral institution may adopt to strengthen its efforts to promote inclusiveness and diversity, these recurring principles have helped define the success of these programs and should be fundamental to institutional initiatives:

- Committed Leadership and Inclusiveness as a Core Value
- Strategic Planning
- Supportive Institutional Policies

- Sufficient Funding and Ongoing Development
- Student Identification
- Recruitment
- Follow Through
- Mentoring and Role Modeling
- Cultural Proficiency and Organizational Change

The following table describes each principle in detail.

Principle	Key Points
Committed Leadership and Inclusiveness as a Core Value	√ Demonstrate commitment to inclusiveness by institutional leaders √ Understand the role of various members of the institution's community √ Provide professional self assessments √ Provide professional development
Strategic Planning	√ Explicitly state outcomes √ Demonstrate willingness to assess, modify and change √ Integrate inclusiveness across institutional functions √ Implement multi-faceted approach; Include specific steps to achieving inclusiveness and diversity √ Develop strategies based on discipline and program readiness
Evaluation and Accountability	√ Demonstrate broad accountability √ Recognize inclusiveness as based on ideas √ Link evaluation of progress to strategic plans √ Evaluate administrative leadership performance based on inclusiveness success √ Celebrate progress
Supportive Institutional Policies	√ Develop clear policies with regard to inclusiveness and diversity √ Acknowledge the value of difference along with its challenges √ Link inclusiveness policies to global competitiveness and interdependence √ Develop multiple criteria and inclusive input upon which to base admissions √ Base faculty and staff hiring policies on inclusiveness

Sufficient Funding and Ongoing Development	√ Understand shifts in financial support and accountability √ Assess impact on low income groups and plans to respond adequately √ Permeate the use of institutional resources with core value of inclusiveness. Link College and department budgets to inclusiveness success √ Provide doctoral level assistantships and scholarships, infrastructure support, and faculty development that contribute to inclusiveness and diversity √ Support inclusiveness in doctoral education as long-term investment in the economic well-being of our state
Student Identification, Recruitment, and Follow-Through	√ Collaborate with primary and secondary schools to help prepare students for doctoral level work √ Recruit historically underrepresented students from minority-serving and non-minority serving institutions into doctoral programs √ Provide faculty support and sponsorship of promising students √ Build effective doctoral student networks and peer support √ Build community outreach and recruitment for underrepresented populations
Mentoring and Role Modeling	√ Systematize mentoring programs, but allow for flexibility and genuine development of mentoring relationships √ Distinguish between effective mentoring and advising √ Provide training of faculty to improve or develop mentoring skills √ Increase presence of historically underrepresented faculty √ Create genuine interest in the personal success of doctoral students √ Provide resource allocation for mentoring programs
Cultural Proficiency and Organizational Change	√ Require willingness to learn from, appreciate and implement change based on cultural differences √ Recognize that individuals and organizations are at various levels of cultural proficiency √ Institutionalize inclusiveness as a core value

The following section suggests specific strategies for making inclusiveness a reality at your institution.

Stage One: Open the Door to Inclusiveness

1. Establish inclusiveness as a core value of your institution:

    - Explicitly address inclusiveness in institutional master planning and mission statements and as a priority of strategic planning and marketing of doctoral programs.

2. Support an inclusive institutional climate:

    - Embrace those from historically underrepresented groups by establishing support groups and activities for doctoral students.
    - Survey the extent to which your institutional climate supports doctoral education.
    - Pilot other institutions' surveys.
    - Conduct focus groups.
    - Collaborate with department chairs.

3. Understand the cultural make-up of the doctoral student population in your region.

4. Fund research and teaching assistantships, fellowships, and scholarships for part-time doctoral students based on financial need, academic merit, and other criteria.

5. Use internal and online sources to promote inclusiveness and to reach out to historically underrepresented groups by
    - advertising in online web sources designed to reach historically underrepresented groups, such as GradPortal.com.
    - including links to online sources such as GradPortal.com and the National Research Council (NRC) in institutional marketing, welcoming packets, and other regular communication with graduate students.
    - training and empowering doctoral students to promote doctoral programs, especially in outreach to undergraduate and master's level students as well as to external community groups.

Stage Two: Engage Your Institution

1. Require doctoral faculty to recruit students from the undergraduate and pre-college levels and help them prepare for doctoral studies.

2. Analyze your institution's position on inclusiveness in relationship to institutional policies and practice.

3. Create action steps based on performance "gaps" identified by this analysis:
   - change admission policies;

   - improve methods for retaining students identified as members of underrepresented groups;

   - find strategies for increasing graduation rates among students of underrepresented groups.

4. Provide effective mentoring practices for historically underrepresented students.

5. Support underrepresented students who are admitted to doctoral programs at institutions from outside of their geographical regions with jobs, funds, and moving allowances.

6. Provide students with a roadmap that leads them to successful completion of the doctoral program. This "path to success" should include
   - setting research agendas
   - creating co-curricular programs that orient historically underrepresented students to their chosen discipline and the department
   - making examples of all documents related to the degree process available in the department's office or graduate student lounge
   - creating discussion groups and offer workshops, and
   - creating an academic climate supported by full-time research and teaching fellowships and assistantships.

Stage Three: Mentor the Mentors

1. Form a steering committee that includes appropriate individuals such as those affiliated with the Equal Employment Opportunity Plan (EEOP) office, the office of institutional research, and the graduate school. This committee should

- establish inclusiveness criteria for the university as a whole.
- facilitate the formulation of similar criteria by individual departments.

2. Utilize national databases such as Integrated Post Secondary Education Data System (IPEDS) to obtain data on comparable institutions.

3. Allocate time each year for staff/faculty to develop inclusiveness/diversity data for doctoral education reporting.

4. Develop inter-institutional relationships such as partnerships and other program consortia with HBCUs and HSIs.

5. Set specific, aggressive goals for recruiting and supporting qualified undergraduate and master's level historically underrepresented students.

6. Establish two positions: "Chief of Inclusiveness" and "Diversity Representative," separate from EEO positions. These positions will define, implement, enforce, and evaluate accountability measures and incentives.

7. Create meaningful relationships with state and local legislators and community and business leaders – especially those who have demonstrated leadership in providing support and resources to help serve underrepresented students.

Stage Four: Produce Exemplary Colleagues

1. Increase research funding for doctoral programs that effectively serve historically underrepresented students.

2. Imbed doctoral curricula with real-world professional experiences that will facilitate the entry of doctoral students, particularly underrepresented students, into academia.

3. Make concerted efforts to invite underrepresented doctoral students to author journal articles, book chapters, and book reviews from the outset of their training and to present their research at regional and national conferences.

4. Provide these students with access to writing tutorials that they need to successfully publish or present their work.

5. Plan to place doctoral graduates into faculty positions with the greatest need for diversity.

Conclusion

Today, there are more African Americans, Hispanics, Asians, and Native Americans earning doctoral degrees in our state than ever before. However, we must do more to raise the number and improve the academic preparation of doctoral students from historically underrepresented groups. Inclusiveness is much more than seeking equal representation by race/ethnicity, and far more than increasing the numbers and percentages of underrepresented groups. Inclusiveness connotes the "creation and sustenance of culturally pluralistic and inclusive institutions that affirm the presence of difference…and value excellence at all levels of the institution" (Slaughter, 2003, p. 8). Inclusiveness is a core value that respects intellectual activity by welcoming differences of ideas and embracing excellence in scholarly activity based on the quality of those ideas.

Being able to critically analyze ideas and function in a fast-changing social order and global economy is particularly important to doctoral students, who will be expected to contribute creatively and uniquely in the service of society. Promoting and achieving inclusiveness in doctoral education will enable scholars and researchers to prepare doctoral students in Texas to understand, appreciate, and thrive within the context of difference. A pervasive spirit of inclusiveness will allow doctoral students to understand the contributions that are uniquely theirs and to embrace contrasting ideas necessary to address common concerns.

Broadly speaking, promoting inclusiveness and increasing diversity will require continued institutional change, policy assessments, and cultural proficiency at all levels of higher education. Most importantly, accountability measures must be established at institutional and state levels to effect change and to measure progress. The THECB affirms that "regardless of the legal and political future of affirmative action, universities must continue to develop strategies that are effective in helping to make graduate education responsive to the intellectual aspirations of students. In so doing, universities will contribute to creating a truly pluralistic society" (CGS, 2003, June 23).

Texas institutions of higher education must continue to commit to inclusiveness as a core value. This commitment begins with the president and includes administrative, faculty, and staff levels. Presidents and academic leaders must lead and promote an institutional attitude that asks not how we can bring diverse doctoral students to our programs, but how we can, as an institution and as leaders, change to best serve the needs of historically underrepresented groups (GEAC, 2007).

References

Alger, J. (1999). *Affirmative action in higher education: A current legal overview*. [Available from the American Council on Education (ACE), Making the case for affirmative action in higher education]. Retrieved March 1, 2007, from http://www.acenet.edu/bookstore/descriptions/making_the_case/legal/legal_overview.cfm

Alliances for Graduate Education and the Professoriate (AGEP, n.d.) *About AGEP*. Retrieved April 9, 2007, from http://ehrweb.aaas.org/mge/About.htm

American Council on Education, ACE. (June 4, 1998). *On the importance of diversity in higher education.* Retrieved March 12, 2007, from http://www.fdu.edu/visitorcenter/diversity.html

American Council on Education (2006). *Minorities in higher education: Twenty-second annual status report*. Washington, D.C.: ACE Publications. [Authors: Cook, B. J. and Córdova, D. I.].

American Council on Education (2007). What you can do: University/College change of opinion. In *Making the case for affirmative action in higher education*. Retrieved March 1, 2007 from http://www.acenet.edu/bookstore/descriptions/making_the_case/cando/cando.cfm

Bensimon, E. M. (2007). *Equality as a fact, equality as a result: A matter of institutional accountability*. [Occasional Paper: Second in a series and a part of The unfinished agenda: Ensuring success for students of color.]. Washington, D.C.: American Council on Education.

Bial, D. (2004). Alternative measures for college admissions: A relational study of a new predictor for success. PhD. dissertation, Harvard University.

Brown, H. A. (2006). *Graduate Enrollment and Degrees: 1986-2005.* Washington, D.C.: Council of Graduate Schools. Retrieved October 15, 2006, from http://www.cgsnet.org/portals/0/pdf/R_GED2005.pdf

Bryson, J. and Crosby, B. (1992). *Leadership for the common good: Tackling Public Problems in a Shared-Power World*. San. Francisco: Jossey-Bass.

Center for Higher Education Policy Analysis (2004). *The road ahead: Improving diversity in graduate education*. University of Southern California, Rossier School of Education. Retrieved November 1, 2006 from http://www.usc.edu/dept/chepa/documents/publications/ImprovingDiversity.pdf

Chang, M.J. (Winter, 2005). Reconsidering the diversity rationale. Winter 2005, *Liberal Education.* Winter 2005. Retrieved April 10, 2007, from http://www.aacu.org/liberaleducaiton/le-wi05/le-wi05feature1.cfm

Clayton-Pedersen, A. R., Parker, S., Smith, D. G., Moreno, J. F., and Teraguchi, D. H. (2007). *Making a real difference with diversity: A guide to institutional change*. Association of American Colleges and Universities.

College Board. (2007). *Achieving diversity in higher education*. Retrieved November 1, 2006, from http://www.collegeboard.com/highered/ad/ad.html

Council of Graduate Schools, CGS (2003, June 23). *Building an inclusive graduate community: A statement of principles*. Retrieved on March 12, 2007, from http://www.cgsnet.org/Default.aspx?tabid=235

Council of Graduate Schools, CGS. (2006). *Abstracts of Winning Proposals, CGS/Peterson's Award for Promoting an Inclusive Graduate Community*. Retrieved on March 12, 2007, from http://www.cgsnet.org/Default.aspx?tabid=158

Council of Historically Black Graduate Schools. (2005). Retrieved May 22, 2007, from http://www.chbgs.org/about.html

Fowler, F. C. (2004). *Policy studies for educational leaders: An introduction*. Upper Saddle River, NJ: Pearson Education, Inc.

González, K. P., Marin, P., Perez, L. X., Figueroa, M. A., Moreno, J. F., & Navia, C. (2001). Understanding the nature and context of Latina/o doctoral student experiences. *Journal of College Student Development*, 41, 563-580.

Graduate Education Advisory Committee, Division of Academic Affairs and Research. (2007). [Unpublished proceedings of GEAC meetings: September 22, 2006, and January 19, February 27, March 19, June 8., 2007]. Austin, TX: Texas Higher Education Coordinating Board.

Greer-Williams, N. (2004). *Underrepresented doctoral students: The cultural and institutional barriers that hinder their ability to graduate.* An unpublished dissertation, Western Michigan University.

Guerra, P. L. (1994). *Hispanic student perceptions of factors contributing to their access and success in graduate education at the University of Texas at Austin: A case study*. Unpublished dissertation, University of Texas at Austin.

Hamilton, C. A. (1998). *Factors that influenced the persistence of minority doctoral students at Northeast Research University*. Unpublished dissertation, State University of New York at Albany.

Henze, R., Katz, A., Norte, E., Sather, S. E., and Walker, E. (2002). *Leading for diversity*. Thousand Oaks, CA: Corwin Press, Inc.

Lindsey, R. B., Robins, K. N., and Terrell, R. D. (2003). Cultural proficiency: A manual for school leaders. Thousand Oaks, CA: Corwin Press, Inc.

Lovitts, B. (2001). *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Lutcher, D. E. (2001). *The relationship between perceived availability of mentors, expressed need for mentoring, and student satisfaction among African American and Hispanic American graduate students*. Unpublished dissertation, University of San Francisco.

McMillan, W. (July, 2004). "I could go work in a factory, but this is something I want to achieve": Narratives into social action. *Race, Ethnicity and Education. 7*(2), 115-134.

National Science Foundation. (2003, September). *Women, minorities, and persons with disabilities in science and engineering-2002: Graduate enrollment* (NSF 03-312). Retrieved Oct 12, 2006, from http://www.nsf.gov/sbe/srs/nsf03312/c4/c4s6.htm

National Science Foundation. (2005, October 20) *Guide to Programs / Browse Funding Opportunities*. Retrieved May 22, 2007, from http://www.nsf.gov/funding/browse_all_funding.jsp

National Science Foundation. (February 7, 2007). *Centers of Research Excellence in Science and Technology* (CREST*)*. Retrieved May 22, 2007, from http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6668&org=NSF

Ph.D. Project. (2007). Retrieved March 22, 2007, from http://www.phdproject.org/mission.html

Renaud, E. A. (2003). *Meaningful experiences in graduate school among Hispanic/Latino/Chicano faculty who attained their Ph.D.* An unpublished dissertation. University of Missouri-Columbia.

Sedlacek, W. E. (2004). *Beyond the big test: Noncognitive assessment in higher education*. San Francisco: Jossey-Bass.

Shom, C. (2006, Winter). Minorities and the egalitarian. *Journal of College Admission*. Winter 2006, 8-13.

Slaughter, J. (2003, April). *The search for excellence and equity in higher education: A perspective from an engineer*. Unpublished paper presented at the Woodruff Distinguished Lecture, the George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA.

Sternberg, R. J. (January/February 2005). Accomplishing the goals of affirmative action—with or without affirmative action. *Change*. January/February 2005, 6-13.

Syverson, P. D., & Bagley, L.R. (1997). *Graduate Enrollment and Degrees: 1986-1997.* Washington, D.C.: Council of Graduate Schools.

Texas Comptroller of Public Accounts. (1998). *Higher Education: Setting the framework*. [As found in Bordering the Future]. Retrieved April 10, 2007, from http://www.window.state.tx.us/border/ch04/ch04.html

Texas Higher Education Coordinating Board, Access and Equity Division (1992). *Search guidelines to enhance diversity*. Austin, TX.

Texas Higher Education Coordinating Board (1994). *Study of minority and women recruitment and retention programs*. Austin, TX.

Texas Higher Education Coordinating Board (1998). *Report on the representation of women and racial and ethnic minorities in Texas public institutions of higher education*. Austin, TX.

Texas Higher Education Coordinating Board (2000). *Closing the Gaps by 2015: The Texas higher education plan*. Austin, TX.

Texas Higher Education Coordinating Board (2000). *Priority plan to strengthen education at Prairie View A&M University and at Texas Southern University*. Austin, TX.

Texas Higher Education Coordinating Board (2004). *Doctoral education in Texas, Part 1: Past trends and critical issues*. Austin, TX.

Texas Higher Education Coordinating Board (2004). *Doctoral education in Texas, Part 2: Recommendations for the State*. Austin, TX.

Texas Higher Education Coordinating Board (2006). *Closing the Gaps Goals and Targets Summary*. [Revised 2006.]. Retrieved March 2, 2007, from http://www.thecb.state.tx.us/reports/PDF/1176.PDF

Texas Higher Education Coordinating Board (2006). *History of Closing the Gaps*. Retrieved March 10, 2007, from http://www.thecb.state.tx.us/ClosingtheGaps/history.cfm

Texas Higher Education Coordinating Board (2006, July). *Closing the Gaps by 2015: 2006 Progress Report* . Retrieved March 5, 2007, from http://www.thecb.state.tx.us/ClosingTheGaps/

Texas Higher Education Coordinating Board (2006). *Regional Plan for Texas Higher Education*. Austin, TX.

Texas Higher Education Coordinating Board, Accountability System. (2007). 2005 Key Measures for Participation. [Closing the Gaps interactive reporting database.]. Available from http://www.txhighereddata.org/Interactive/Accountability/.

U.S. Department of Education, Office of Civil Rights (2004). *Achieving diversity: Race-Neutral alternatives in American education*. Washington, D.C. Retrieved November 10, 2006, from http://www.ed.gov/about/offices/list/ocr/edlite-raceneutralreport2.html

U.S. Supreme Court rules on University of Michigan cases. (2003, June 23). *UM News Service*. [University of Michigan.]. Retrieved June 12, 2007, from http://www.umich.edu/news/Releases/2003/Jun03/supremecourt.html

Welsh, J.F. (2004, December). Supporting minority student access and achievement: Is there a role for the States? *Race, Ethnicity and Education. 7*(4), 385-399.

Appendices

Appendix A

Development of Equal Higher Education Opportunity in Texas

In 1970, *Adams v. Richardson* was filed against the U.S. Department of Health, Education and Welfare (HEW) by the National Association for the Advancement of Colored People (NAACP). The *Adams* case alleged that HEW had failed to implement and enforce Title VI of the Civil Rights Act of 1964, aimed at eliminating racial discrimination in higher education. According to a report of the Texas Higher Education Coordinating Board (THECB,1998), the NAACP obtained a court order requiring HEW, which later became the U.S. Department of Education (DOE), to implement Title VI and initiate litigation against 10 states that had already been discovered to be in noncompliance with Title VI.

In 1973, the DOE was ordered to investigate higher education in six other states, including Texas, and to issue guidelines for desegregation efforts in those states. The review was conducted by the DOE's Office of Civil Rights (OCR) between 1978 and 1980. The review, which originated as a result of the *Adams v. Richardson* case (THECB, 1998), concluded that Texas had "failed to eliminate the vestiges of its former *de jure* racially dual system of public higher education" (THECB, 1998, p. 17).

On a national level, the admissions landscape changed in 1978 with the U.S. Supreme Court's decision in *University of California Regents v. Bakke* which resulted, according to the College Board (CB, 2007), in institutions abandoning quotas, separate admissions processing, and different financial aid policies for minority students. The ruling stated that a university could take race into account as one, among a number of factors, in student admissions for the purpose of achieving student body diversity. Since then, affirmative action programs in student admissions and financial aid, as well as in the employment of faculty, were largely based on diversity (Alger, 1999).

Texas Equal Educational Opportunity Plan for Higher Education (1983-1988)

To avoid enforcement proceedings, Governor William Clements developed a voluntary plan in compliance with the guidelines issued by OCR to desegregate and increase the representation of African Americans and Hispanics in Texas institutions of higher education. In 1981, Texas submitted a provisional plan to the OCR. After negotiating its terms, Texas submitted a final plan, which was accepted by the OCR in June 1983.

The Texas Equal Educational Opportunity Plan for Public Higher Education -- also known as the Texas Plan-- was born in 1983 in response to the investigation of higher education in Texas. The Texas Plan was monitored by the federal government until 1988.

According to the THECB (1998), the objectives of the first Texas Plan as approved by the OCR were to:

- Enhance Texas Southern University and Prairie View A&M University by providing each institution with resources comparable to those of traditionally Caucasian institutions with similar missions and improving each institution's capability to attract students of all backgrounds;
- Resolve proportional disparities in the enrollment, retention, and graduation rates of African American and Hispanic students at the undergraduate, graduate, and professional school levels;
- Increase the numbers and proportion of African American and Hispanics in faculty, staff, and administrative positions in two-year and four-year institutions; and
- Increase the numbers of African American and Hispanics appointed or elected to governing boards.

South Texas / Border Initiative (1989)

In 1987, the Mexican American Legal Defense and Educational Fund (MALDEF) sued the State of Texas, alleging that border universities were not getting their fair share of state funding. The suit held that other Texas colleges and universities were able to offer better quality programs in better facilities than were available in the border institutions. The Texas Supreme Court overturned a lower court's finding in favor of MALDEF. However, "the resulting public debate over the needs of Border institutions drew the attention of lawmakers, who in 1989 approved the wide-ranging South Texas/Border Initiative" (Texas Comptroller, 1998, n. p.).

The initiative resulted, first of all, in increased funding for border universities to help them "achieve parity with other Texas institutions" (Texas Comptroller, 1998, n. p.). Second, legislators merged several public border institutions with the University of Texas and Texas A&M University systems and upgraded the status of five higher education institutions. In South Texas, for example, Corpus Christi State University was expanded into a four-year university and became affiliated with the Texas A&M University System as Texas A&M University-Corpus Christi, and what was previously Pan American University at Brownsville became the University of Texas at Brownsville. Third, new academic programs and courses, designed to have an immediate impact on Border community needs, were authorized by the THECB. In its first year alone, the initiative drew upon more than $60 million in additional formula and special-item funding for program development. State legislators also authorized almost $240 million in revenue bonds to help underwrite construction and renovation projects at border institutions (Texas Comptroller, 1998).

Texas Equal Educational Opportunity Plan for Higher Education (1989-1994)

That same year, a second five-year plan initiated by Governor Clements continued the initiatives of the first Texas plan, but without federal mandate. It was effective until 1994. The goals of the second Texas Plan aimed to address African American and Hispanic presence in higher education and identified both statewide and institutional objectives. According to the THECB (1998), the second Texas plan aimed specifically to address:

- Undergraduate recruitment, enrollment, and retention
- Enrollment by minorities in graduate and professional schools, and
- Employment of minority faculty and administrators

Access and Equity 2000 (1994-2000)

In 1994, Governor Ann Richards created the third Texas Plan, entitled *Access and Equity 2000*. It was designed to take Texas into the next century and to build upon the work that had begun just a little more than the 10 years prior.

According to the THECB (1998), the objectives of this six-year plan were to:

- Increase the undergraduate graduation rates of African American and Hispanic students to reach parity, at a minimum, with the graduation rate of Caucasian students
- Increase the number of African American and Hispanic graduate and professional school graduates to reach parity, at a minimum, with the number of Caucasian graduates
- Continually increase the number and proportion of African American and Hispanic faculty, administrators and professional staff to reach parity with their proportional representation on the population, and
- Increase the number of minorities and women on governing boards of Texas public institutions of higher education.

Hopwood, et al. v. State of Texas, et al. (1996)

In March 1996, two years after the implementation of *Access and Equity 2000*, the 5th Circuit Court of Appeals ruled in the case *Cheryl J. Hopwood, et al. v. State of Texas, et al.*. The Court of Appeals judged that the University of Texas Law School had violated the equal protection clause of the Fourteenth Amendment when it used racial preference policies in admissions to the law school. Affirmative action programs and the diversity rationale in particular were challenged by *Hopwood, et al. v. State of Texas, et al.,* when it ruled that diversity did not provide a compelling interest for race-conscious decisions in student admissions. This decision dismantled the opinion of *Bakke* of 1978 (Alger, 1999).

The 5th Circuit's ruling raised concerns about the continuation of *Access & Equity 2000*, particularly with regard to the use of racial preferences by institutions to carry out the plan's goals. However, after the *Hopwood* decision, the THECB re-endorsed the plan in January 1997. According to a THECB report on the *Representation of Women and Racial and Ethnic Minorities in Texas Public Institutions of Higher Education* (1998), the Coordinating Board also called on colleges and universities to "vigorously pursue the plan's goals but to use criteria consistent with current state and federal law in the areas of admissions, financial aid, and student retention" (p. 17).

University of Michigan- Grutter v. Bollinger and *Gratz v Bollinger (1997)*

In 1997, two class-action lawsuits were filed by the Center for Individual Rights on behalf of Caucasian students who were denied admission to the University of Michigan's undergraduate and law school programs. The suit claimed the University had used different testing standards for Caucasian and minority students. The University claimed that race was only one among a number of factors taken into account in its admissions process. The institution also adopted new admissions guidelines that "assign points to applicants for academic and non-academic factors, including race, instead of adding fractions based on non-academic factors to a student's grade-point average" (Alger, 1999).

In a split decision, the U.S. Supreme Court affirmed in 2003 the use of affirmative action as practiced by the University of Michigan's Law School, but found that the point-system used in the University's undergraduate admissions process was unconstitutional. Chief Justice William Rehnquist issued the majority opinion in the College of Literature, Science, and the Arts case (*Gratz v. Bollinger*), declaring that while existing affirmative action law established in the Regents of the University of California v. Bakke [1978] allowed for race to be a factor in the admissions process, "it must not be a 'deciding factor.' At issue, said justices, is the point value given to minority applicants" (UM News, 2003). In the Law School decision (*Grutter v. Bollinger*), Justice Sandra Day O'Connor wrote the majority opinion: "The Equal Protection Clause does not prohibit the Law School's narrowly tailored use of race in admissions decisions to further a compelling interest in obtaining the educational benefits that flow from a diverse student body" (UM News, 2003).

Priority Plan 2000

One month after the THECB's re-endorsement of the *Access and Equity 2000* plan, the State of Texas was notified by the OCR of its plans to review the system of higher education in Texas "to ensure that former *de jure* state higher education systems have both implemented their OCR-approved desegregation plans and eliminated vestiges of the formerly *de jure* systems" (as cited in THECB, 1998, p. 17). The OCR conducted its review under the standard set by *United States v. Fordice*. This was a case where the U.S. Supreme Court upheld that any state with a history of segregation in higher

education had to implement affirmative measures, including racial preferences, to eliminate those vestiges. This ruling differed from the one set out by the court in *Hopwood*, which allowed the "use of racial preferences only when a state entity is acting to remedy the present effects of past discrimination" (THECB, 1998, p. 18).

In March, 1999, the OCR reached preliminary conclusions that disparities traceable to *de jure* segregation still existed. These disparities were in the areas of the "mission of the universities, the land grant status of Prairie View A&M University when compared to Texas A&M University, program duplication, facilities, funding and the racial identifiability of public universities in Texas" (THECB, 2000, *Priority plan*, p. 1). A Commitment to Resolve outling a collaborative process by which the issues raised by the OCR were to be treated as "particular and important aspects of an overarching issue for the state: closing gaps in participation and success in higher education across Texas for all the people in the state" (*Priority plan*, p. 1). A Committee on OCR issues was formed as part of the planning process and met between November 1999 and April 2000. The Committee's recommendations were formalized in the *Priority Plan to Strengthen Education at Prairie View A&M University and at Texas Southern University* (THECB, 2000, *Priority Plan*).

Closing the Gaps by 2015: The Texas Plan for Higher Education (2000-2015)

In March 1999, the THECB decided to develop a new higher education plan. The Board emphasized that the new plan should concentrate on the most critical goals, set a date by which to reach the goals, and create a means by which to measure progress toward the goals. The appointed THECB Planning Committee also included business community representatives, community leaders, and former higher education governing board members from around the state. Four task forces were also formed to focus on key issues, namely, OCR issues, participation and success, Health Professions Education, and development of the technology workforce (THECB, 1998).

By September of the same year, the Council for Aid to Education/RAND Corporation was awarded a contract to perform a priority and efficiency analysis of higher education programs and services in Texas. The final reports from the RAND Corporation were presented to the Committee and summarized for the THECB in April 2000. Reports from the Task Forces and Committee on OCR Issues were distributed to all Board members.

In July 2000, a modified draft plan was mailed to more than 1,500 people and groups, including the Governor and other state government officials, public higher education governing board members, public and independent higher education executives, members of business and educational associations including the State Board of Education and the Texas Education Agency, and many others, for comment. Responses supported the goals presented in the Plan, but additional strategies and issues were offered as well.

In October 2000, the THECB approved the *Closing the Gaps* Higher Education Plan. The THECB recognized that the success of *Closing the Gaps* would depend on financial resources and on institutional creativeness and initiative, in meeting institutional targets for 2005, 2010, and 2015. The strategy to develop a performance system to determine institutional targets and progress was one of the plan's key elements (THECB, *History of Closing the Gaps*, 2006). *Closing the Gaps* focuses on four primary areas— participation, success, excellence and research— with overall goals (revised 2006) to be achieved by 2015.

Though designed more explicitly for undergraduate programs, some of the targets also apply more directly or indirectly to doctoral education in Texas, and to the need to continue to address diversity and inclusiveness at the highest levels of higher education. The following is not a comprehensive listing of all *Closing the Gaps* targets; it is an adopted sampling of targets that underlie or create a significant impact for diversity and inclusiveness at the doctoral level:

- **Participation**- Close the gaps in participation rates to add 630,000 more students. The targets for this goal includes increasing the participation rate for African Americans from 4.6% in 2000 to 5.7% by 2015, and increasing the participation rate of Hispanics from 3.7% in 2000 to 5.7% by 2015 (THECB, 2006, *Targets Summary*).

- **Success**- Award 210,000 undergraduate degrees, certificates, and other identifiable student successes from high quality programs. One of the targets for this goal includes increasing the number of students completing doctoral degrees to 3,350 by 2010, and to 3,900 by 2015 (THECB, 2006, *Targets Summary*).

- **Excellence**- Substantially increase the number of nationally recognized programs or services at colleges and universities. Targets include the establishment of ladders of excellence for different types of institutions. Specifically, this target calls for requiring each public college and university to identify one or more programs or services to improve to a level of nationally recognized excellence and prepare a strategic plan to accomplish this goal, and to identify peer institutions for each public institution and establish excellence benchmarks (THECB, 2000).

- **Research**- Increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5% of obligations to higher education institutions across the nation. Specific targets include a) increasing federal science and engineering obligations to Texas universities and Health Related Institution's (HRIs) from 5.6% of the obligations in 2000 (or $1.1 billion in 1998 constant dollars) to 6.5% of obligations to higher education by 2015, and b) increasing research expenditures by Texas public universities and HRIs from $1.45 billion to $3 billion by 2015, which is an approximate 5% increase per year (THECB 2006, *Targets Summary*).

Ongoing Challenges Impacting Texas

In 2006, the State of Michigan passed a ballot proposal that banned public colleges and other state agencies from using preferences to promote diversity. The measure appeared on the ballot as Proposal 2 and was known as the Michigan Civil Rights Initiative. The proposal amended the Constitution of the Great Lakes State to prohibit state agencies and institutions from operating affirmative action programs that grant preferences based on race, color, ethnicity, national origin, or gender. Its passage came just three years after the U.S. Supreme Court upheld the consideration of race in college admissions in the two landmark cases involving the University of Michigan at Ann Arbor. Michigan will no doubt continue to serve as a focal point for legal wrangling over this issue, as will other states such as California that have also challenged affirmative action.

Numerous national and state agencies support the statement by the American Association on Education (ACE), *On the Importance of Diversity in Higher Education*:

> Achieving diversity on college campuses does not require quotas. Nor does diversity warrant admission of unqualified applicants. However, the diversity we seek, and the future of the nation, do require that colleges and universities continue to be able to reach out and make a conscious effort to build healthy and diverse learning environments appropriate for their missions. The success of higher education and the strength of our democracy depend on it (ACE, June 4, 1998).

In general, the two major justifications for race-conscious affirmative action in higher education that have been recognized under the existing civil rights statutes are 1) remedying the present effects of past discrimination and 2) diversity. In recent decisions, courts have looked more carefully at the nature and weight of the evidence required to prove present effects of past discrimination, and have focused narrowly on an institution's ability to remedy effects of past discrimination within that institution only, as opposed to systemic or societal discrimination (Alger, 1999). As to diversity, courts have been looking for articulated evidence of the educational benefits of diversity, and for how those benefits are tied to the educational mission of colleges and universities (Alger, 1999).

Appendix B

A Resolution of the CGS

Building An Inclusive Graduate Community: A Statement of Principles

The CGS reaffirms its belief that seeking students from groups historically underrepresented in graduate education and encouraging these individuals to pursue advanced degrees serves the best interests of higher education and the nation at large. Broadening the talent pool from which graduate students are chosen enhances the educational and scholarly activities of all students and faculty and is sound academic policy.

Graduate education establishes an environment of intellectual collegiality in which interaction among people with differing points of view is essential to learning. Students must confront subject matter at the leading edge of their disciplines, a territory frequently characterized by different and often opposing points of view. They must learn to question what is before them in a manner that is both rigorous and evenhanded. They must maintain high standards for the criteria of proof, and they must be not only willing, but also eager to test their ideas in a forum of their peers and colleagues. In this way, they hone their own skills and learn to engage in and contribute to the continuing discussion that defines the current consensus in any field.

By bringing diverse individuals together to engage in intellectual activities, graduate education engenders respect for intellect, regardless of source, and builds a community whose members are judged by the quality of their ideas. The importance of this kind of preparation cannot be overstated. Graduate study serves to educate and train tomorrow's teachers, scholars, scientists and engineers, and future leaders in business, government, and the professions. Upon graduation, these individuals will work in a rapidly changing world where race, gender, ethnicity, nationality, and related factors merge with knowledge, merit, and talent to play important roles in shaping society. Their ability to deal with differing ideas and viewpoints will enable them to interact effectively with people in all sectors of society throughout the world.

Underlying the intellectual inquiry that is fundamental to graduate education are strategies designed to create an inclusive and diverse graduate community. Virtually all of these strategies have utilized the broad concept of affirmative action: universities have affirmed their commitment to equality of opportunity by taking direct and specific actions to provide access to graduate education to those from historically underrepresented groups.

During the past 30 years, graduate schools have created a variety of approaches to identify, recruit, retain, and graduate such students. In the series, Achieving an Inclusive Graduate Community, the CGS highlights a variety of successful programs in graduate schools across the country. They range from summer research opportunity programs for undergraduates to community outreach activities designed to introduce the idea of graduate school to parents and their children. A number of programs have focused on accessibility issues and ways of increasing financial support through tuition scholarships, fellowships, traineeships, and assistantships with funds from a variety of public and private sources. These programs have been developed through graduate schools and supplement many others based in departments and colleges. As central university offices, graduate schools are able to work with different departments and disciplines to establish broad approaches for dealing with common concerns and for sharing ideas about program design and effectiveness.

These efforts have been and continue to be successful. Today, over half of all graduate students are women, and more American minority students are earning graduate degrees than at any time in our history. The success of these students has led to increased awareness of opportunities lost and aspirations unfulfilled because of past exclusionary practices. Their accomplishments underscore the importance of recognizing and nurturing intellectual ability wherever it exists.

Clearly, there is great potential for advanced study among populations previously underrepresented in graduate education. Their numbers in many fields, however, still are small, and continuing effort is needed to maintain the momentum.

There can be no question that admission to graduate school must be based on the intellectual and creative capabilities of the students and their potential for advanced study. Universities must continue to refine and improve procedures for assessing these capabilities. They also must retain the authority to select from among qualified applicants those who have the potential to bring new ideas and different perspectives to graduate education. Affirmative action, broadly conceived, has been an effective strategy for accomplishing this objective. Regardless of the legal and political future of affirmative action, universities must continue to develop strategies that are effective in helping to make graduate education responsive to the intellectual aspirations of students. In so doing, universities will contribute to creating a truly pluralistic society.

Statement of Principles initially adopted by the Membership of the CGS on December 13, 1996, as updated and reaffirmed by the Executive Committee of the CGS' Board of Directors on June 23, 2003.

For more information, contact the **President's Office**.

(Available from the CGS:
http://www.cgsnet.org/portals/0/pdf/Inclusiveness_Resolution.pdf)

Appendix C

On the Importance of Diversity in Higher Education

American Council on Education

America's colleges and universities differ in many ways. Some are public, others are independent; some are large urban universities, some are two-year community colleges, others small rural campuses. Some offer graduate and professional programs, others focus primarily on undergraduate education. Each of our more than 3,000 colleges and universities has its own specific and distinct mission. This collective diversity among institutions is one of the great strengths of America's higher education system, and has helped make it the best in the world. Preserving that diversity is essential if we hope to serve the needs of our democratic society.

Similarly, many colleges and universities share a common belief, born of experience, that diversity in their student bodies, faculties, and staff is important for them to fulfill their primary mission: providing a quality education. The public is entitled to know why these institutions believe so strongly that racial and ethnic diversity should be one factor among the many considered in admissions and hiring. The reasons include:

- ☐ Diversity enriches the educational experience. We learn from those whose experiences, beliefs, and perspectives are different from our own, and these lessons can be taught best in a richly diverse intellectual and social environment.
- ☐ It promotes personal growth--and a healthy society. Diversity challenges stereotyped preconceptions; it encourages critical thinking; and it helps students learn to communicate effectively with people of varied backgrounds.
- ☐ It strengthens communities and the workplace. Education within a diverse setting prepares students to become good citizens in an increasingly complex, pluralistic society; it fosters mutual respect and teamwork; and it helps build communities whose members are judged by the quality of their character and their contributions.
- ☐ It enhances America's economic competitiveness. Sustaining the nation's prosperity in the 21st century will require us to make effective use of the talents and abilities of all our citizens, in work settings that bring together individuals from diverse backgrounds and cultures.

American colleges and universities traditionally have enjoyed significant latitude in fulfilling their missions. Americans have understood that there is no single model of a good college, and that no single standard can predict with certainty the lifetime contribution of a teacher or a student. Yet, the freedom to determine who shall teach and be taught has been restricted in a number of places, and come under attack in others. As a result, some schools have experienced precipitous declines in the enrollment of African American and Hispanic students, reversing decades of progress in the effort to assure that all groups in American society have an equal opportunity for access to higher education.

Achieving diversity on college campuses does not require quotas. Nor does diversity warrant admission of unqualified applicants. However, the diversity we seek, and the future of the nation, do require that colleges and universities continue to be able to reach out and make a conscious effort to build healthy and diverse learning environments appropriate for their missions. The success of higher education and the strength of our democracy depend on it.

On the Importance of Diversity in Higher Education-ACE (Continued)

Endorsements

AACSB - The International Association for Management Education

ACT (formerly American College Testing)

American Association for Higher Education

American Association of Colleges For Teacher Education

American Association of Colleges of Nursing

American Association of Colleges of Pharmacy

American Association of Collegiate Registrars and Admissions Officers

American Association of Community Colleges

American Association of Dental Schools

American Association of State Colleges and Universities

American Association of University Administrators

American Association of University Professors

American College Personnel Association

American Council on Education

American Indian Higher Education Consortium

American Medical Student Association

American Society for Engineering Education

APPA: The Association of Higher Education Facilities Officers

Association of Academic Health Centers

Association of American Colleges and Universities

Association of American Law Schools

Association of American Medical Colleges

Association of American Universities

Association of Catholic Colleges and Universities

Association of College Unions International

Association of Community College Trustees

Association of Governing Boards of Universities and Colleges

Association of Jesuit Colleges and Universities

Coalition of Higher Education Assistance Organizations

College and University Personnel Association

Consortium on Financing Higher Education

Council for Advancement and Support of Education

CGS

Council of Independent Colleges

Educational Testing Service

Golden Key National Honor Society

Hispanic Association of Colleges and Universities

Law School Admission Council

Lutheran Educational Conference of North America

NAFSA: Association of International Educators

National Association for College Admission Counseling

National Association for Equal Opportunity in Higher Education

National Association of College and University Business Officers

National Association of Graduate and Professional Students

National Association of Independent Colleges and Universities

National Association of State Universities and Land-Grant Colleges

National Association of Student Financial Aid Administrators

National Association of Student Personnel Administrators

National Collegiate Athletic Association

National Council of Educational Opportunity Associations

NAWE: Advancing Women in Higher Education

New England Board of Higher Education

The College Board

The College Fund/UNCF

The Education Trust

University Continuing Education Association

Source: Fairleigh Dickinson University, http://www.fdu.edu/visitorcenter/diversity.html

APPENDIX D:

TAXONOMY: DOCTORAL DEGREES BY DISCIPLINE AND CIP CODES

Graduate Education Advisory Committee-Inclusiveness Project

Doctoral programs are classified according to broad fields of study. Grouping is done according to the categories used in the 2004 report on Doctoral Education in Texas and the taxonomy *Classification of Instructional Programs* (CIP) developed by the National Center for Education. Numbers in parentheses correspond to major CIP categories. Programs are grouped for the THE GEAC Project on Inclusiveness, as follows:

CATEGORY	CIP Codes/Programs Included
Business	Sales and Marketing Operations/Marketing and Distribution (08), Business, Management, Marketing, and Related Support Services (52)
Education	Education (13)
Engineering	Engineering (14), Science Technologies/Technicians (41)
Health	Health Professions and Related Clinical Sciences (51)
Liberal, Fine Arts, Architecture	Architecture and Related Services (04), Area, Ethnic, Cultural, and Gender Studies (05), Communication, Journalism and Related Programs (09), Foreign Languages, Literatures and Linguistics (16), English Language and Literature/Letters (23), Liberal Arts and Sciences, General Studies and Humanities, (24), Library Science (25), Multi-Interdisciplinary Studies (30), Philosophy and Religious Studies (38), and Visual and Performing Arts (50)
Psychology	Psychology (42)
Science and Math	Natural Resources and Conservation (03), Computer and Information Sciences and Support Services (11), Biological and Biomedical Sciences (26), Mathematics and Statistics (27), and Physical Sciences (40)
Social Sciences	Family and Consumer Sciences (19), Vocational Home Economics (20), Parks, Recreation, Leisure and Fitness Studies (31), Security and Protective Services (43), Public Administration and Social Service Professions (44), Social Sciences (45)
Agriculture	Agriculture, Agriculture Operations, and Related Sciences (01), Agricultural Sciences (02)

Other	Communications Technologies/Technicians and Support Services (10), Personal and Culinary Services (12), Engineering Technologies/Technicians (15), Technology Education/Industrial Arts (21), Legal Professions and Studies (22), Reserve Officer Training Corps (JROTC, ROTC) (28), Military Technologies (29), Basic Skills (32), Citizenship Activities (33), Health-Related Knowledge and Skills (34), Interpersonal and Social Skills (35), Leisure and Recreational Activities (36), Personal Awareness and Self-Improvement (37), Theology and Religious Vocations (39), Construction Trades (46), Mechanic and Repair Technologies/Technicians (47),Precision Production (48), Transportation and Materials Moving (49), History (54), Dental, Medical and Veterinary Residency Programs (60)

APPENDIX E:

DOCTORAL DEGREE ENROLLMENT

Table E-1

Doctoral Enrollment at Public Universities by Region, Institutional Name, and Race/Ethnicity (Texas, 2006)

Region / University	Caucasian	Af Am	Hisp	Asian	Intl	Other	Total
CENTRAL							
Texas A&M University	37.9%	4.5%	6.7%	2.4%	46.8%	1.8%	
	1308	154	232	83	1614	61	**3452**
Texas State Univ-San Marcos	69.1%	3.9%	14.0%	6.7%	5.1%	1.1%	
	123	7	25	12	9	2	**178**
University of Texas at Austin	46.9%	2.2%	6.3%	5.0%	37.3%	2.3%	
	2411	112	324	259	1918	118	**5142**
GULF COAST							
Prairie View A&M University	12.5%	68.8%	3.6%	2.7%	11.6%	0.9%	
	14	77	4	3	13	1	**112**
Sam Houston State University	63.6%	14.2%	10.5%	1.2%	9.7%	0.8%	
	157	35	26	3	24	2	**247**
Texas Southern University	3.0%	83.4%	2.4%	5.3%	4.1%	1.8%	
	5	141	4	9	7	3	**169**
University of Houston	39.6%	4.3%	8.2%	5.8%	38.5%	3.6%	
	571	62	119	83	556	52	**1443**
HIGH PLAINS							
Texas Tech University	49.7%	3.0%	5.9%	3.2%	30.0%	8.3%	
	736	44	88	47	444	123	**1482**
West Texas A&M University	78.6%	0.0%	0.0%	0.0%	21.4%	0.0%	
	11	0	0	0	3	0	**14**
METROPLEX							
Tarleton State University	88.7%	1.6%	4.8%	0.0%	1.6%	3.2%	
	55	1	3	0	1	2	**62**

Table E-1—Continued

Texas A&M Univ- Commerce	75.5%	12.5%	7.5%	1.5%	2.1%	0.9%	
	253	42	25	5	7	3	**335**
Texas Woman's University	63.6%	16.6%	6.5%	3.9%	8.6%	1.0%	
	461	120	47	28	62	7	**725**
University of North Texas	61.4%	5.9%	4.7%	3.3%	21.8%	2.9%	
	921	89	70	49	327	44	**1500**
University of Texas at Arlington	33.6%	5.9%	3.2%	9.3%	47.8%	0.2%	
	294	52	28	81	418	2	**875**
University of Texas at Dallas	38.7%	6.3%	5.9%	5.8%	42.8%	0.5%	
	356	58	54	53	394	5	**920**
SOUTH TEXAS							
Texas A&M Univ-Corpus Christi	47.5%	2.8%	45.9%	1.1%	2.2%	0.6%	
	86	5	83	2	4	1	**181**
Texas A&M Univ- Kingsville	25.7%	2.1%	40.1%	2.1%	28.9%	1.1%	
	48	4	75	4	54	2	**187**
Texas A&M International Univ	11.1%	0.0%	55.6%	3.7%	29.6%	0.0%	
	3	0	15	1	8	0	**27**
Univ of Texas at San Antonio	39.6%	5.2%	24.5%	2.8%	26.7%	1.2%	
	168	22	104	12	113	5	**424**
Univ of Texas-Pan American	19.4%	1.0%	50.5%	1.9%	24.3%	2.9%	
	20	1	52	2	25	3	**103**
SOUTH EAST							
Lamar University	57.3%	13.6%	1.8%	2.7%	23.6%	0.9%	
	63	15	2	3	26	1	**110**
Stephen F. Austin State Univ	88.1%	3.4%	3.4%	0.0%	1.7%	3.4%	
	52	2	2	0	1	2	**59**
UPPER RIO GRANDE							
University of Texas at El Paso	32.2%	2.6%	30.1%	1.6%	33.5%	0.0%	
	122	10	114	6	127	0	**379**

Source: THECB, CBM 001 Reports THECB, 2007

Table E-2

Doctoral Enrollment at Health-Related Institutions by Region, Institutional Name, and Race/Ethnicity (Texas, 2006)

Region / Health Science Center (HSC)	Caucasian	Af Am	Hisp	Asian	Intl	Other	Total
CENTRAL							
Texas A&M System HSC	32.6%	0.7%	5.2%	4.4%	54.8%	2.2%	
	44	1	7	6	74	3	**135**
GULF COAST							
Univ of Texas HSC- Houston	41.7%	6.4%	7.7%	8.8%	34.1%	1.3%	
	319	49	59	67	261	10	**765**
UT Medical Branch Galveston	52.1%	5.6%	8.1%	4.2%	26.1%	3.9%	
	148	16	23	12	74	11	**284**
HIGH PLAINS							
Texas Tech HSC	59.0%	0.6%	4.2%	4.8%	28.3%	3.0%	
	98	1	7	8	47	5	**166**
METROPLEX							
Univ of North Texas HSC	37.9%	11.2%	12.4%	6.5%	27.2%	4.7%	
	64	19	21	11	46	8	**169**
UT Southwestern Med Center	43.1%	2.3%	8.3%	8.8%	32.5%	4.9%	
	244	13	47	50	184	28	**566**
SOUTH TEXAS							
Univ of Tx HSC- San Antonio	32.2%	2.4%	11.9%	3.8%	44.4%	5.2%	
	92	7	34	11	127	15	**286**

Source: THECB, CBM 001 Reports THECB, 2007

Appendix F

DOCTORAL DEGREE ATTAINMENT

Table F-1
Doctoral Attainment at Public Universities by Region, Institutional Name, and Race/Ethnicity (Texas, 2006)

Region / Institution	Caucasian	Af Am	Hisp	Asian	Intl	Other	Total
CENTRAL							
Texas A&M University	34.6%	2.6%	3.9%	3.0%	54.0%	1.9%	
	185	14	21	16	289	10	**535**
Texas State Univ-San Marcos	60.0%	13.3%	0.0%	26.7%	0.0%	0.0%	
	9	2	0	4	0	0	**15**
University of Texas at Austin	45.1%	2.8%	6.9%	4.4%	38.9%	1.8%	
	367	23	56	36	316	15	**813**
GULF COAST							
Prairie View A&M University	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	
	0	1	0	0	0	0	**1**
Sam Houston State University	76.9%	10.3%	2.6%	2.6%	7.7%	0.0%	
	30	4	1	1	3	0	**39**
Texas Southern University	17.6%	76.5%	5.9%	0.0%	0.0%	0.0%	
	3	13	1	0	0	0	**17**
University of Houston	45.2%	1.2%	6.6%	6.6%	37.8%	2.5%	
	109	3	16	16	91	6	**241**
HIGH PLAINS							
Texas Tech University	48.8%	1.4%	4.7%	0.9%	40.4%	3.8%	
	104	3	10	2	86	8	**213**
West Texas A&M University	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	0	0	0	0	0	0	**0**
METROPLEX							
Tarleton State University	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	0	0	0	0	0	0	**0**
Texas A&M Univ- Commerce	79.1%	9.3%	9.3%	2.3%	0.0%	0.0%	
	34	4	4	1	0	0	**43**

Table F-1—Continued

Texas Woman's University	72.7%	6.5%	3.9%	6.5%	10.4%	0.0%	
	56	5	3	5	8	0	**77**
University of North Texas	67.8%	3.9%	3.3%	3.3%	17.8%	3.9%	
	103	6	5	5	27	6	**152**
University of Texas at Arlington	29.8%	2.9%	2.9%	26.0%	38.5%	0.0%	
	31	3	3	27	40	0	**104**
University of Texas at Dallas	30.2%	2.6%	1.7%	1.7%	63.8%	0.0%	
	35	3	2	2	74	0	**116**
SOUTH TEXAS							
Texas A&M Univ-Corpus Christi	57.1%	0.0%	42.9%	0.0%	0.0%	0.0%	
	8	0	6	0	0	0	**14**
Texas A&M Univ- Kingsville	34.2%	0.0%	34.2%	0.0%	31.6%	0.0%	
	13	0	13	0	12	0	**38**
Texas A&M International Univ	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	0	0	0	0	0	0	**0**
Univ of Texas at San Antonio	37.9%	0.0%	24.1%	13.8%	24.1%	0.0%	
	11	0	7	4	7	0	**29**
Univ of Texas-Pan American	0.0%	25.0%	50.0%	0.0%	25.0%	0.0%	
	0	1	2	0	1	0	**4**
SOUTH EAST							
Lamar University	75.0%	0.0%	0.0%	0.0%	25.0%	0.0%	
	3	0	0	0	1	0	**4**
Stephen F. Austin State Univ	93.8%	0.0%	0.0%	0.0%	6.3%	0.0%	
	15	0	0	0	1	0	**16**
UPPER RIO GRANDE							
University of Texas at El Paso	23.5%	2.9%	29.4%	0.0%	41.2%	2.9%	
	8	1	10	0	14	1	**34**

Source: THECB, CBM 009 Reports THECB, 2007

Table F-2

Doctoral Attainment at Health-Related Institutions by Region, Institutional Name, and Race/Ethnicity (Texas, 2006)

Region / Health Science Center (HSC)	Caucasian	Af Am	Hisp	Asian	Intl	Other	Total
CENTRAL							
Texas A&M System HSC	7.7%	7.7%	15.4%	0.0%	69.2%	0.0%	
	1	1	2	0	9	0	**13**
GULF COAST							
Univ of Texas HSC- Houston	52.5%	3.0%	10.1%	9.1%	23.2%	2.0%	
	52	3	10	9	23	2	**99**
UT Medical Branch Galveston	52.8%	8.3%	8.3%	5.6%	25.0%	0.0%	
	19	3	3	2	9	0	**36**
HIGH PLAINS							
Texas Tech HSC	43.8%	0.0%	0.0%	12.5%	37.5%	6.3%	
	7	0	0	2	6	1	**16**
METROPLEX							
Univ of North Texas HSC	33.3%	8.3%	8.3%	16.7%	33.3%	0.0%	
	4	1	1	2	4	0	**12**
UT Southwestern Med Center	51.5%	0.0%	2.9%	13.2%	29.4%	2.9%	
	35	0	2	9	20	2	**68**
SOUTH TEXAS							
Univ of Tx HSC- San Antonio	22.6%	0.0%	6.5%	3.2%	61.3%	6.5%	
	7	0	2	1	19	2	**31**

Source: THECB, CBM 009 Reports THECB, 2007

For Further Reading

Adam, M. (September 11, 2006). Mentoring minorities at Cleveland State University. In *The Hispanic Outlook in Higher Education, (16)*24. Paramus, N.J.: The Hispanic Outlook in Higher Education Publishing Company, Inc.

Allen, J. (2007). *The new faculty and graduate mentor*. Herndon, VA.: Stylus Publishing, L.L.C.

Anderson, J. A. (2007). *Driving change through diversity and globalization*. Herndon, VA.: Stylus Publishing, L.L.C.

Appel, M., Catwright, D., Smith, D. G., and Wolf, L. E. (1996, Fall). Research shows positive student response to diversity initiatives. [Overview of The impact of diversity on students: A preliminary review of the research literature.]. *Diversity Digest*. Washington, D.C.: Association of American Colleges and Universities.

Castellanos, J., and Jones, L. (Eds.). (2003). *The majority in the minority: Expanding the representation of Latina/o faculty, administrators and students in higher education*. Herndon, VA.: Stylus Publishing, L.L.C.

Castellanos, J., Gloria, A. M., Kamimura, M. (Eds.). (2006). *The Latina/o pathway to the Ph.D*. Herndon, VA.: Stylus Publishing, L.L.C.

Chang, M. J. & Astin, A. W. (Winter, 1997). Who benefits from racial diversity in higher education. In *Diversity Digest*. Washington, D.C.: Association of American Colleges and Universities.

College Board. (2007). *Achieving diversity in higher education*. Retrieved November 1, 2006, from http://www.collegeboard.com/highered/ad/ad.html

Dolan, T. G. (2006, September 11). University of Georgia's diversity initiative has "massive impact". In *The Hispanic Outlook in Higher Education, (16)*24. Paramus, N.J.: The Hispanic Outlook in Higher Education Publishing Company, Inc.

Elie, G. M. (1989). *Environmental perceptions, stress levels, and demographic conditions affecting black, Hispanic, and white graduate students*. An unpublished dissertation, University of Florida.

Ellis, E.M. (Fall, 2000). Race, gender and the graduate student experience: Recent research. *Diversity Digest*. Association of American Colleges and Universities.

Goodman, K. (2003). The class is half empty: Report supports class-based affirmative action. In *Diversity Digest*, *7*(3), 2003. Association of American Colleges and Universities.

Gunnings, B. B. (1982). Stresses on minority administrators on predominantly white campuses. *Minority Voices*, 5, 29-35.

Hale, Jr., F. W. (2003). *What makes racial diversity work in higher education*. Herndon, VA.: Stylus Publishing, L.L.C.

Jones, L. (Ed.). (2002, Sep.–Oct.). Retaining African Americans in higher education: Challenging paradigms for retaining students, faculty and administrators. The Journal of Higher Education, 73(5), pp. 652-659.

Jones, M. J., Goertz, M.E., Kuh, C.V., eds. (1992). *Minorities in graduate education: Pipeline, policy, and practice*. [Proceedings of a conference held on May 17 and 18, 1990, at the Henry Chauncey Conference Center, sponsored by Educational Testing Service and the Graduate Record Examinations Board]. Princeton, New Jersey: Educational Testing Service.

Living the dream: A new generation of minority Business School professors. [The Ph.D. Project]. New York, NY: Canyon Mountain Publishing.

Malloy, G. M. (2003, June). Filling the Pipeline: A 'Doctors' Academy High School Program in California Graduates its First Class. *AAMC Reporter*.

Moody, J. (2004). *Faculty diversity: Problems and solutions*. London: Routledge.

Nettles, M. T. (c. 1990). *Black, Hispanic and White doctoral students: Before, during, and after enrolling in graduate school*. Princeton, N.J.: Educational Testing Service.

National Board on Graduate Education. (1976, June). *Minority group participation in graduate education*.

Olivar, M. A. (1982). Federal higher education policy: The case of Hispanics. *Educational Evaluation and Policy Analysis,* 4, 301-310.

Parker, W. P., & Scott, A. C. (1985). Creating an inviting atmosphere for college students from ethnic minority groups. *Journal of College Student Personnel*, 26, 82-87.

Pruitt-Logan, A. S. (1999, Fall). Preparing future faculty to focus on diversity. In *Diversity Digest*. Washington, D.C.: Association of American Colleges and Universities.

Pease-Hernandez, C. E.. (2004). *Talking/Doing diversity still: A critical focus group study investigating difference, community, and social justice in pedagogical practices*. Unpublished doctoral dissertation, Bowling Green State University.

Rapid Intellect Group, Inc. (2001). *Attitudes and perceptions about diversity among counselor education graduate students*. Retrieved November 2, 2006, from http://www.accessmylibrary.com/comsite5/bin/consite5.pl?page =document

Schneider, C.G. (2003). Diversity and democracy: the unfinished work. In Diversity *Digest, 7*(3), 2003. Washington, D.C.: Association of American Colleges and Universities.

Smith, T. M. (2005). *Doctoral education in the sciences: African American students reflect on their experiences*. Unpublished doctoral dissertation, University of North Carolina at Chapel Hill.

Southern Regional Education Board. (2005). *Doctoral Scholars Program*. Retrieved May 22, 2007, from http://www.sreb.org/programs/dsp/dspindex.asp

Texas Higher Education Coordinating Board. (1997). *Final report: The Advisory Committee on women and minority faculty and professional staff*. Austin, Texas.

Texas Higher Education Coordinating Board, Access and Equity Division. (1997). *Second status report: Advisory Committee on Criteria for Diversity*. Austin, Texas.

Texas Higher Education Coordinating Board. (2000). *A uniform recruitment and retention strategy: A plan to identify, attract, enroll and retain students who reflect the population of Texas*. Austin, Texas.

Texas Higher Education Coordinating Board, Special Committee on Globalization and Higher Education (2001). *Globalizing Texas higher education for the new century: A response to Closing the Gaps*. Austin, Texas.

Thomas, L, Cooper, M., and Jocey, Q. (Eds.). (2003). *Improving completion rates among disadvantaged students*. Herndon, VA.: Stylus Publishing, L.L.C.

Ugwu, P. I. (2005). *Houston Community College faculty experience with diverse students in the classrooms: A search for effective instructional approaches.* [Texas.]. An unpublished dissertation. The University of Texas at Austin.

U.S. Department of Education, Office of Civil Rights. (2004). *Achieving Diversity: Race-Neutral Alternatives in American Education*. Washington, D.C. Retrieved November 10, 2006, from http://www.ed.gov/about/offices/list/ocr/edlite-raceneutralreport2.html

Watson, L., Terrell, M. C., Wright, D. J., Bonner II, F., Cuyjet, M., Gold, J., Rudy, D., & Person, D. R. (2002). *How minority students experience college: Implications for Planning and Policy*. Herndon, VA.: Stylus Publishing, L.L.C.

Other Online Student Resources

GradPortal

GradPortal.org was developed to encourage minority students to pursue a graduate education. The website has become a recognized marketing opportunity for graduate programs. Through the use of GradPortal, institutions can advertise to historically underrepresented groups, and help them find the best programs that are suitable for them. GradPortal also provides direct links to graduate programs. GradPortal provides program searches, funding information, mentoring resources, articles, advertising, as well as faculty resources. The GradPortal.org initiative began with a grant from the Fund for the Improvement of Postsecondary Education (FIPSE). This grant was awarded to the University of South Carolina, CGS, Educational Testing Service, and the National Research Council.

Website: http://www.GradPortal.org

National Research Council (NRC) Assessment of Research Doctorate

The NRC Assessment will be available online for the first time in 2007. The NRC assessment is used by grant agencies seeking to determine who should receive funding, faculty members wanting to know how their programs rate, and graduate students looking for the right place to study. The first NRC survey was published in 1982, and the second in 1995. The third NRC survey took place in 2006, with survey results to be reported in 2007. Doctoral programs were assessed and compared to peer institutions in this study. There are several changes in the 2006 survey. There is a significant increase in the number of doctoral programs surveyed. Programs in 60 fields were assessed, compared to 41 in 1995. The Taxonomy of Fields now includes fields in agricultural sciences, communication, American studies, theater, and kinesiology. A list of fields to be included is also available online. The survey places considerably more emphasis on quantitative measures of doctoral education. Results of the survey are expected in 2007 in an online database form, instead of delivery in the form of the less accessible "big blue book." Lastly, the program rankings are presented as a range, not as an absolute number. The surveys do not include ratings based solely on reputation. The NRC is an important resource not only for comparison to peer institions on diversity, but also as an indication of peer institutions that have been successful in this area.

website: http://www7.nationalacademies.org/resdoc/index.html