The Road Ahead:
Improving Diversity in
Graduate Education

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Graduate Education

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Foreword

One key challenge for the academy is to increase the ranks of faculty of color in all institutions. Simply stated, in a country that honors cultural pluralism it is incumbent on postsecondary institutions to reflect the diversity that exists in the United States. Insofar as graduate education remains the primary training ground for academe's next generation, we focus here on ways to improve graduate education for scholars of color.

In the pages that follow we first offer an overview of the state of diversity in graduate education and thereafter consider the racial and ethnic makeup of the nation's faculty. We then offer recommendations for how to improve graduate education for students of color. The monograph is designed to help faculty, administrators and policy makers by offering strategies that might be utilized to enable more graduate students of color to assume positions in the professoriate.

We base our recommendations on a three-year study conducted within the Center for Higher Education Policy Analysis at the University of Southern California. The research was generously supported by the James Irvine Foundation. We intend for this monograph to add to the on-going discussion about how to improve the academy in general, and how to increase the presence of scholars of color in postsecondary institutions in particular. We welcome your feedback.

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Section I :
Background

*A*merican society is increasingly diverse. As the country becomes more diverse, however, inequities remain. Latinos and African Americans are disproportionately poorer than their White counterparts, for example, and they are less likely to vote and to participate in the public sphere. A key challenge, then, is to ensure that everyone has the possibility to be full participants in the United States of the twenty-first century.

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. Yet, one of the more vexing problems for many faculty and administrators who work in higher education has been the continued under-representation of faculty of color. Given that doctoral education is the primary training ground for future faculty, graduate programs should not only enroll a requisite number of scholars of color, but should also prepare future faculty leaders for work in more diverse institutions of higher education. In this monograph we suggest several guiding principles for adoption by administrators and faculty to improve diversity in graduate education and in the professoriate.

> *"...graduate programs should not only enroll a requisite number of scholars of color, but should also prepare future faculty leaders for work in more diverse institutions of higher education."*

Based on a three-year evaluation of a doctoral fellowship program sponsored by the Campus Diversity Initiative of the James Irvine Foundation, researchers from the Center for Higher Education Policy Analysis (CHEPA) at the University of Southern California (USC) developed nine strategies for how to diversify graduate education. To arrive at these principles we consulted with scholars in the field on reforming graduate education and conducted a review of the relevant literature. A list of individuals with whom we spoke is noted in the acknowledgements. We then developed an evaluative framework to guide our investigation of the practices and policies that are identified in the literature and used in campus programming. Selected works from the review appear at the end of this monograph in an annotated bibliography, which may be useful for those concerned with increasing the pool of faculty of color. The larger goal of our investigation, and one that helped generate the strategies proposed in this paper, has been to foster institutional change that would lead to an increase in the employment of faculty of color in American postsecondary education. To be sure, our view on diversifying graduate education is also framed by our own scholarly positions and our experiences working together. We are Anglo, Latino, and African American, and at the time of this writing we were a full professor, an associate professor, and a graduate student.

In referring to racial and ethnic groups that historically have been excluded from higher education, the term "minority" overlooks the richness and value found in communities built on difference. Consequently, we use the terms "persons of color," "students of color," and "faculty of color" to emphasize this desired complexity. We also acknowledge the cultural distinctions that differentiate racial and ethnic groups from one another. Our work here does not assume that persons of color constitute a monolithic group in postsecondary education or that "one strategy fits all," as if we had derived a solution that would apply to all students and all institutions. And yet, we recognize that without some sense of how to proceed and how to improve the current situation, anyone concerned with change can do little more than tread water.

> "...without a culturally pluralistic population academia will be unable to create a culturally pluralistic environment."

We begin with an overview of descriptive statistics to demonstrate that progress to diversify graduate education and to improve the numbers of graduates of color has been slow. As we indicate, doctoral education is not uni-dimensional. We disaggregate data not only by race and ethnicity, but also by discipline to provide context for the doctoral education found on numerous campuses, in different departments, and across several disciplines. On the whole, the data reveal the under-representation of racial and ethnic persons of color throughout graduate education. To flesh out the contexts we are considering, we focus in greater detail on doctoral enrollment and graduation data for students of color, and then provide data on faculty employment in the nation's postsecondary institutions.

Ensuring the proportional representation of persons of color in graduate education is an effective method for achieving equity in Ph.D. training and in the academy. At the same time, we concur with others who argue that diversity is not limited to simple numbers or to percentages of persons of color found at a given institution. Diversity 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). We could not agree more. We also recognize that without a culturally pluralistic population academia will be unable to create a culturally pluralistic environment.

Finally, it is beyond the scope of this monograph to give proper attention to other worthwhile rationales for diversifying the academy. The concern here pertains to the population that now exists as graduate students and how to improve their experiences. Additional work also needs to be done to determine how to increase the population of graduate students of color. Richard Cherwitz of the University of Texas, Austin, for example, has proposed "intellectual entrepreneurship" as a central way to diversify graduate recruiting at predominately White research universities (PWI) (Cherwitz, 2004; Cherwitz & Boyd, 2004). Cole and Barber (2003) suggest evaluation and expanded efforts in programs such as the Mellon Mays Undergraduate Fellowship (p. 243). We encourage the reader to consider multiple strategies for achieving a culturally pluralistic academic community.

Section 2 :
Baseline Data

Demographics. As many observers of demographic trends in the United States have noted for some time, the population of persons of color is growing faster than the White population. Table 1 depicts these changes across a recently completed decade.

Table 1 : US Population, 1990 to 2000

*Source: Adapted table United States Bureau of the Census. (2000). **Population by race and Hispanic or Latino origin for the United States: 1990 and 2000**. Retrieved, from the World Wide Web: http://www.census.gov/population/www/cen2000/phc-t1.html.*

Race/Ethnicity	1990 (%)	2000 (%)	% Change
White	199,686,070 (80.3)	211,460,626 (75.1)	- 5.2
African American	29,986,060 (12.1)	34,658,190 (12.3)	+0.2
Latino (of any race)	22,354,059 (9.0)	35,305,818 (12.5)	+3.5
Asian American	6,908,638 (2.8)	10,242,998 (3.6)	+1.8
American Indian/Alaskan Native	1,959,234 (0.8)	2,475,956 (0.9)	+0.1
Total	248,709,873	281,421,906	

*Totals do not add up to 100% because of individuals identified as "other race" or "of two or more races" that are left out.

The U.S. Census Bureau has indicated that Latinos are now the largest population of color in the country (Fears & Cohn, 2003). Graduate education remains one of the primary indicators of access to jobs of higher prestige and income, as well as a prerequisite for better quality of life for persons of color.

Scholars have looked to the educational "pipeline" as one possible solution to fix the problem (Astin; 1982; Clague, 1990; Cross, 1991; Smith & Turner, 2004). Some suggest that the pipeline "leaks" because unwelcoming work environments discourage qualified individuals from entering into or persisting in faculty careers (Trower & Chait, 2002; Turner & Myers, 2001). Another popular metaphor is that of a "crack" in the pipeline characterized by qualified doctorates of color who choose postdoctoral work outside the academy (Trower & Chait, 2002).

"Graduate education remains one of the primary indicators of access to jobs of higher prestige and income, as well as a prerequisite for better quality of life for persons of color."

Enrollments. Enrollment of persons of color in graduate education, including masters and professional degrees (MBA, MD, JD, etc.) shows that they participate in postgraduate education at rates below their respective share of the overall population. The Council of Graduate Schools found in 1997, for example, that African American and Latino enrollments in graduate education including masters,

professional, and doctoral programs comprised 15% (African Americans 9%; Latinos 6%) of total enrollments, while Whites accounted for 80% (Syverson & Bagley, 1997, p. 10). However, African Americans and Latinos now account for 25% of the population, while Whites make up 75%. The pool of individuals with bachelors degrees from four-year institutions who are eligible to go on to graduate education also remains largely Anglo-American, with Whites making up 75% of that group (U.S. Department of Education, 2002, p. 327).

Specific data on doctoral (Ph.D. only) enrollments appear in Table 2.

Table 2 : Doctoral Enrollments, All Fields*

Source: Internet-based WebCASPAR system (National Science Foundation, 2002)

	1990 (%)	2000 (%)	% Change
Resident Alien	102,160 (25.2)	121,392 (27.8)	19,232
U.S. Citizen and Perm. Residents	302,242 (74.8)	314,220 (72.2)	11,978
White	249,077 (61.5)	228,726 (52.5)	-20,351
African Americans	12,352 (3.1)	20,080 (4.6)	7,728
Latino	10,563 (2.6)	17,826 (4.0)	7,263
Asian American/Pacific Islander	16,484 (4.0)	27,022 (6.2)	10,538
American Indian/Alaskan Native	1,113 (0.2)	1,695 (0.3)	582
Total	**404,402**	**435,612**	**31,210**

"All Fields" in this report refers to Graduate Student Survey (GSS) fields, including sciences and engineering, physical sciences, math and computer sciences, health fields, psychology, social sciences, etc.

The data show that the number of incremental resident alien or international doctoral enrollments between 1990 and 2000 was greater than the combined number of incremental domestic doctoral enrollments of all races and ethnicities in the same period. During those years, enrollments for students of color grew in actual numbers and in their share of all domestic (U.S. citizen and permanent residents) doctoral enrollments.

"Although at the start of the twenty-first century, African Americans and Latinos enrolled at rates greater than they had in 1990, they continued to enroll in doctoral education below their representative share of the overall population."

Although at the start of the twenty-first century, African Americans and Latinos enrolled at rates greater than they had in 1990, they continued to enroll in doctoral education below their representative share of the overall population.

By 2000, Asian Americans were over-represented in enrollments compared to their share of the general populace. The increase in the number of Asian Americans enrolled in doctoral education from 1990 to 2000 was greater than for any other group except for non-residents.

Degree completion. Table 3 shows statistics for the number of doctoral degrees earned by domestic citizens in the most recent decade. While African American and Latino doctoral recipients increased during the period, the percentage share of degrees earned for each group was not equivalent to their share in the overall

population (see Table 1, 12.3% and 12.5%, respectively). Conversely, Asian American doctoral recipients were over-represented in doctoral programs with regard to their share of the general population.

Table 3 : Earned Doctoral Degrees by Domestic Citizens, All Fields, 1991 & 2000

Source: Office on Minorities in Higher Education (American Council on Education, 2002)

	1991 (%)	2000 (%)	% Change
U.S. Citizens	25,559 (100.0)	27,888 (100.0)	+ 8.3
White	22,413 (87.6)	22,911(82.1)	- 5.5
African American	1,003 (4.4)	1,656 (5.9)	+ 1.5
Latino (of any race)	731 (2.7)	1,157 (4.1)	+ 1.4
Asian American	786 (3.0)	1407 (5.0)	+ 2.0
American Indian/Alaskan Native	130 (0.5)	169 (0.6)	+ 0.1
Non U.S. Citizens	11,169 (NA)	11,406 (NA)	

Disciplinary fields. Table 4 provides a snapshot of the disciplinary fields within which domestic doctoral recipients earned their degrees in the academic year 1999-2000. In education alone, African Americans earned more doctoral degrees than in all other fields combined. African American and Latino degree attainment in the social sciences was the strongest among all fields, but both combined were outpaced by Asian American degree attainment in engineering and the physical sciences.

Table 4 : Doctoral Degrees Earned in Selected Fields, Academic Year, 1999-2000*

Source: Adapted from the Digest of Education Statistics, 2001
(U.S. Department of Education 2001, p.334)

	Education (%)	Engineering (%)	Humanities (%)	Soc. Sciences (%)	Phy. Sciences (%)
White	4,915 (79.2)	2,001 (77.5)	2,245 (85.9)	2,645 (83.7)	2,115 (85.1)
African American	803 (12.9)	94 (3.6)	99 (3.7)	203 (6.4)	71 (2.8)
Latino (any race)	262 (4.2)	89 (3.4)	143 (5.4)	130 (4.1)	72 (2.8)
Asian American/ Pacific Islander	176 (2.8)	391 (15.1)	118 (4.5)	165 (5.2)	210 (8.4)
American Indian/ Alaskan Native	44 (0.7)	5 (0.1)	8 (0.3)	17 (0.5)	15 (0.6)
Total U.S. Citizens	**6,198**	**2,580**	**2,613**	**3,160**	**2,483**

* Percentage share calculated for U.S. citizens only, non-citizens excluded.
Categories are taken from fields of study listed in the Classification of Instructional Programs (1990). Social Sciences include Anthropology, Archeology; Criminology; Demography/Population Studies; Economics; Geography; International Relations and Affairs; Political Science and Government; Sociology; and Urban Affairs/Studies. Physical Sciences category includes the fields of Astronomy; Astrophysics; Atmospheric Sciences and Meteorology; Chemistry; Geology; Geochemistry; Geophysics and Seismology; Paleontology; Geological Sciences; Metallurgy; Oceanography; Earth Science; Planetary Science; Physics; and Optics. Humanities category includes fields of English, Foreign Languages, Philosophy, and History.

Faculty of color. As Table 5 indicates, racial and ethnic diversity of full-time faculty in higher education has also lagged behind that of the overall population. White full-time faculty in 1998 accounted for more than eight of ten faculty members. Full-time faculty in the natural sciences and engineering were the least diverse, employing the lowest percentages of African American and Latino faculty, and with Asian Americans over-represented. African Americans were employed in education and the social sciences more than in any other field. Latino faculty representation was greatest in the humanities, particularly in the subfields of foreign languages and literatures. In terms of reflecting persistent under-representation as compared to the overall domestic population, percentage shares for both African American and Latino faculty were consistent with the percentage of doctoral degrees earned by those two groups. Although the data show no significant decrease in the share of doctoral degrees earned by students of color or in the percentage of faculty of color hired by postsecondary institutions, there is no indication that the system of higher education has achieved racial and ethnic diversity in the professoriate.

Table 5 : Full-Time Instructional Faculty in Degree-Granting Institutions, Fall 1998

Source: Adapted from the Digest of Education Statistics, 2001
(U.S. Department of Education 2001, p.276)

	All Fields (%)	Education (%)	Engineering (%)	Humanities (%)	Soc. Sciences (%)	Nat. Sciences (%)
White	476,900 (85.1)	33,436 (83.8)	19,250 (77.0)	67,791 (83.9)	48,720 (84)	95,162 (85.5)
African American	25,580 (5.1)	2,875 (8.6)	600 (2.4)	3,636 (4.5)	3,886 (6.7)	3,450 (3.1)
Latino (Any race)	18,493 (3.3)	1,316 (3.3)	975 (3.9)	5,252 (6.5)	1,740 (3.0)	3,228 (2.9)
Asian American	32,530 (5.8)	1,436 (3.6)	4,025 (16.1)	3,798 (4.7)	2,900 (5.1)	9,127 (8.2)
American Indian/ Alaskan Native	3,923 (0.7)	319 (0.8)	150 (0.6)	323 (0.4)	754 (1.3)	334 (0.3)
Total Faculty	**560,400**	**39,900**	**25,000**	**80,800**	**58,4000**	**111,300**

If higher education is to diversify its faculty, it can no longer conduct "business as usual" within its institutions and academic departments. At USC we have benefited from the university's efforts to increase the number of doctoral students of color. Based on a review of the literature and on a three-year investigation of a campus diversity initiative focused on one doctoral fellowship program, we asked ourselves, "What had we learned?"

We identify nine strategies that presidents, provosts and vice chancellors, graduate deans, and directors of graduate education might consider to diversify doctoral education. We include recommendations for specific steps to be taken at a given institution. We conclude with an annotated bibliography of resources, which those responsible for improving diversity in doctoral education may wish to consult in formulating policy and enhancing practice.

Again, permit us to reiterate that we by no means intend for the list of strategies proposed in this paper to be a definitive or conclusive method for how the academy must diversify education. At the same time, one cannot reach a destination without at least a general idea for how to get there. The under-representation of graduate students of color in doctoral programs has not been completely ignored in higher education, but improving the situation has remained elusive. We offer these suggestions, then, as possible routes to take to achieve this goal.

Strategies for Improving Diversity in Graduate Education

Strategy # 1

Strategy #1: Establish Benchmark Institutions and Criteria for Diversity.

Institutional discussions on how to diversify graduate education benefit from the careful identification of data to answer the question, "How are we doing?" At the most basic level, population trends and shifting demographics serve as impetus for institutions to diversify their graduate programs. Before constituents who are involved in the decision-making process begin to formulate plans, however, data should be obtained to provide a current snapshot of the status of students of color in graduate education across the university. Data from four areas are central: admissions, retention, graduation, and placement. Criteria to consider using to identify comparative institutions include Carnegie classification, control (public/private), membership to disciplinary associations, and geography.

Begin by defining "diversity" at the institution.

The campus community should adopt and endorse a statement on diversity that clearly outlines the institutional goals with respect to diversity. Use of clear definitions allows faculty and administrators to develop appropriate targets and benchmarks. Data should inform decision-makers of where opportunities for improvement exist. Institutional goals might include proportional enrollment of doctoral students of color in select academic departments based on the racial and ethnic demographic make-up of the general population (see Table 1, above). Where admitting students of color may be a greater obstacle than graduating students of color, one response is to recruit actively and systematically from masters programs that enroll large numbers of students of color and encourage them to pursue doctoral study.

Track current institutional performance in terms of diversity.

Use of year-by-year and longitudinal data allows one to track diversity in graduate education over a specific time horizon. Data should be reported such that each academic unit within the university is listed and can be compared to others. From this information decision-makers can determine which units are either well ahead or well behind others in the area of diversity.

- Disaggregate admissions, retention, and graduation data by race and ethnicity, as well as by discipline and department.

- Utilize national databases such as the Integrated Postsecondary Education Data System (IPEDS) to obtain data on comparative institutions.

- Differentiate graduate student data for professional schools and programs from those on doctoral education.

- Redesign job descriptions for personnel in the office of institutional research to include the collection of these data.

- Allocate time each year for staff and faculty for the development of diversity data for graduate education reporting.

- Develop relationships with and recruit aggressively from the masters institutions of Historically Black Colleges and Universities (HBCU) and the Hispanic Association of Colleges and Universities (HACU).

- Form a steering committee that includes individuals affiliated with the Equal Employment Opportunity Program (EEOP) office, the office of institutional research, and the graduate school to generate annual reports on diversity in graduate education.

Strategy # 2

Strategy #2: Know the Institutional Climate for All Graduate Students.

To understand the campus environment as experienced by graduate students one must recognize the various climates for different racial and ethnic subgroups of the graduate student community. Fixed-item surveys and open-ended interviews—complementary methodologies—both provide insight into the climate. Quantitative approaches enable the institution to understand how subgroups within the graduate community differ in their views of, and experiences with, the environment. A survey provides a view of the climate across the campus. Qualitative inquiry is useful for understanding the "real world" climate of diversity inside academic departments. The department is most often the focal point for doctoral education; understanding how institutional policies operate within different subunits requires detailed, holistic information.

> "The department is most often the focal point for doctoral education; understanding how institutional policies operate within different subunits requires detailed, holistic information."

- Identify survey instruments used at other institutions; pilot the instruments and make appropriate revisions.

- Conduct focus groups at the departmental level to explore key processes and mile-markers of the doctoral program (e.g., preliminary screening, qualifying examinations, and award processes for assistantships).

- Collaborate with department chairs to revise relevant policies and enhance the learning environment for all students.

Strategy #3: Emphasize Diversity in Academic Leadership and Institutional Records.

Postsecondary institutions seldom fail to profess in their mission statements their commitment to preparing students to succeed in the current pluralistic, diverse society. Without question, this goal should permeate the text of other key institutional documents, including the mission statements of subunits (e.g., student services divisions, academic departments, etc.), presidential speeches, strategic plans, and job descriptions. A similar focus on service to diverse individuals should appear in those documents.

The role of graduate deans varies according to the context and culture of each institution. Nonetheless, responsibility for diversifying graduate education must rest with the academic administration in some form. If graduate school deans are better positioned to provide leadership, to spearhead the formation of new working groups, or to partner with academic unit deans, then they should do so to achieve the institutional goals of diversity.

In situations where graduate school deans have a dual role—one as administrator, the other as faculty member—they should influence programming priorities by using their access to discretionary funds.   Deans may construct a conceptual framework for programs aimed at diversifying graduate education, and then re-direct uncommitted funds or faculty expertise toward implementing such programs. Graduate deans are one hub of the overlapping networks of faculty across the university. They are able to draw attention to successful efforts to diversify graduate education that might otherwise go overlooked.

actions to take

- Consider editing the graduate school's mission statement to educate a more diverse professoriate.

- Encourage graduate deans to spearhead the formation of new committees charged with diversifying graduate education.

- Combine internal and external institutional funds to enhance diversity.

- Hold departments accountable for progress based on plans the faculty have developed.

Strategy #4: Coordinate Institution-Wide Diversity Projects.

Lack of communication between individuals and units working to diversify graduate education too often can lead to competition for the same, scarce resources. Yet, diversifying doctoral education requires collaboration among individuals and across units throughout the institution. Those accountable for achieving diversity need the perceived and actual authority to enact change and to hold others responsible for their actions as they pertain to the institution's success or failure to diversify graduate education. Institutions committed to diversifying graduate education hire individuals into administrative level positions to help attain institutional diversity. Their professional profile equally reflects core institutional values of academic excellence and diversity. Failure to designate authority to an administrative position responsible for oversight of diversity projects reduces the chance for significant change.

- Structure the position of Chief Diversity Officer with a tenure-track faculty appointment to attract and develop top candidates.

- Provide ample support staff with enough resources to hire full-time administrators.

- Provide a central office location with direct reporting to the university president or provost.

Strategy # 5

Strategy #5: Make Explicit Practices Pervasive in Doctoral Education.

One of the unstated assumptions in training doctoral students is that after finishing their required courses Ph.D. students are transformed into independent scholars. Yet, doctoral students of color are often the first in their families to pursue graduate education and may be unfamiliar with the customs, practices, and policies common in the program. Institutional policies that govern a doctoral student's transition from the beginning to the advanced stages of the program are sometimes unclear. One view of doctoral education emphasizes master-apprentice forms of training, which currently characterizes the day-to-day lives of both majority faculty and doctoral students as well as the lives of faculty of color and students of color in departments at PWIs (Turner & Thompson, 1993). However, in the absence of explicit guidance, doctoral students of color are more likely to suffer from alienation within the department or institution, and may be deprived of valuable social networking with faculty who often act as interpreters of departmental policies for students.

- Develop co-curricular programs (i.e., workshops, seminars, etc.) that orient students of color to the discipline and the department.

- Provide examples of all documents (e.g., qualifying exams, etc.) related to the degree progress process and make them easily available in the department's office or doctoral student lounge.

- Form discussion groups with students approaching qualifying examinations to explicate the details and requirements of the process.

- Establish a summer writing workshop for students approaching the dissertation stage. Seek soft funding to implement the workshop.

- Organize workshops focused on grant and proposal writing for all but dissertation (ABD) students.

- Provide appropriate financial support to finance doctoral education.

Strategy # 6

Strategy #6: Professionalize the Doctoral Curricula.

Professionalization is a carefully structured process through which doctoral students learn what being a faculty member entails. Students emerge from a doctoral program (i.e., university, department, dissertation committee) with varying degrees of preparation for faculty work. Faculty and administrators who are committed to professionalizing all students ensure that both students of color and majority students get frequent opportunities to perform activities central to the academic profession in research universities. Many doctoral students of color look favorably upon professorial positions at institutions with large numbers of undergraduates of color. Experience with racially and ethnically diverse institutional contexts better inform career decision-making for students of color as they consider the type of institution most appropriate for their personal and professional goals as future faculty—either at research universities, state comprehensive universities, liberal arts colleges, or community colleges.

All students can benefit from professionalization, but to do so students must be socially integrated into their departments. Otherwise, as is often the case with students of color, they miss important opportunities to present their work or to be introduced to key leaders in professional associations or publishing outlets. Organized research and publishing activities provide all students with opportunities to explore their interest in and capacity for work as faculty.

actions to take

- Invite graduate students to co-author journal articles, book chapters, and book reviews from the outset of their training.

- Encourage graduate students to present their research at national conferences.

- Support travel to and networking at national conferences for cohorts of first-year doctoral students.

- Include activities in graduate seminars for students to develop peer review and critique skills in a supportive environment.

Strategy # 7

Strategy #7: Address the Placement of Graduates into Faculty Positions.

A student's successful transition from graduate school to an entry-level faculty position relies heavily on the support of the sponsoring academic department. A concerted effort to place doctoral graduates in academic positions is one important step in ensuring that more faculty of color find positions where they can thrive.

Departments should maintain consistent records of all placements over the last ten years. As encouragement to incoming students, rosters with profiles of alumni serving in postgraduate positions should be bound and placed in the graduate student lounge or in the administrative office of the department. Further steps should be taken to post the information on the website of the department. Profile information should include undergraduate institution, title of dissertation, dissertation advisor, and institutions recruited to during the placement process.

Administrators should actively pursue external funds to support postdoctoral fellowships in departments that demonstrate the capacity to support postdoctoral fellows, as well as show promise of moving up in rankings within the field with additional research support. Postdoctoral fellowships provide recently graduated doctoral students with an opportunity to further develop their research skills and scholarship before entering the job search for junior faculty positions. To that end, faculty within each department should consider applying to the university for funds to support postdoctoral fellows where external funding is a less viable option for the faculty member and the institution.

Department chairs, for example, might forward a two-year placement plan to the dean. The plan might include the assignment of contact faculty in the department who will identify colleagues at other leading institutions to be approached regarding the prospects of hiring the department's graduates. Chairs might include in the plan a list of all ABD and recently graduated but unplaced doctoral students and alumni from the department who are placed in junior or tenured faculty positions. Discussion sessions that include the director of graduate studies, the department chair, and all relevant students should be held periodically to review placement activities of the plan and how well alumni and unplaced graduate students have been included in the job search. Where possible, program alumni should be invited to attend these meetings to advise of pitfalls to avoid or effective strategies to adopt.

actions to take

- Develop a departmental plan that has placement as its goal.

- Encourage and support postdoctoral training for advanced doctoral students.

- Establish through the graduate student senate a travel fund for job-talk visits to institutions that invite students, but do not fund candidate travel.

- Establish through institutional centers or institutes of teaching effectiveness a series of conferences focusing on preparing job talk presentations.
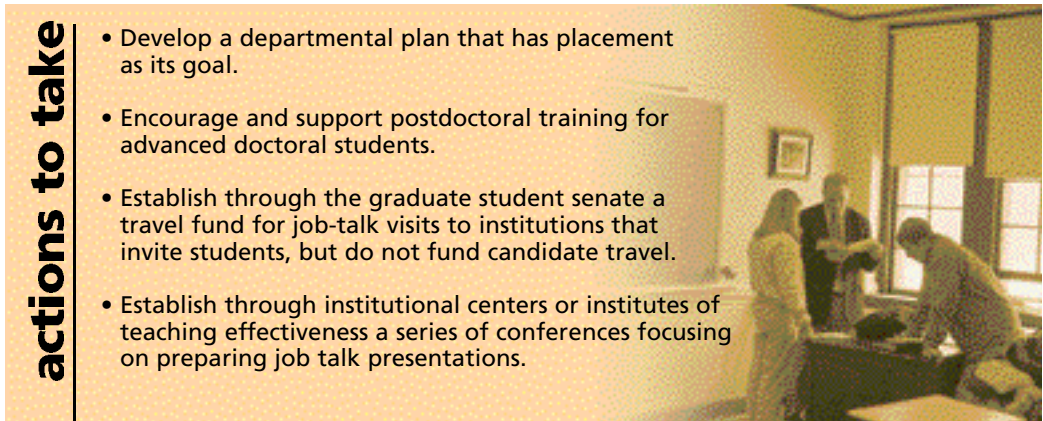
Strategy # 8

Strategy #8: Develop a Systematic Plan for Mentoring.

While most first-generation graduate students of color who are admitted into a program exhibit the intellectual capabilities needed to succeed, many are unfamiliar with the politics involved in navigating their way through and beyond doctoral education. Mentoring helps students learn the "hidden curriculum" of graduate education and develop the relevant individual aptitudes.

Reframe graduate teaching and research assistantships.

Students of color often have difficulty finding mentors because there are too few faculty of color, with whom they might feel more comfortable, or they are unaware of or excluded from the academic and social networks within which majority students become familiar to faculty. Of necessity, then, is that majority faculty involve themselves proactively in all efforts aimed at enhancing diversity in graduate education. Graduate assistantships, in their most common form, are

generally allocated to academic departments. "Portable" assistantships, in contrast, allocate funds to the individual student rather than to the department, and allow for greater student choice in their teaching assistant and/or research assistant training. With such funding, students can more easily facilitate and pursue mentoring relationships without the barriers typically associated with funding granted to the home department.

Provide faculty training on how to mentor.

Institutions should encourage faculty to mentor students of color by organizing workshops to help faculty learn to be effective cross-cultural mentors. In many cases, students of color view a mentor as someone who will take an interest in them personally and professionally. Mentoring has not only a formal dimension, but also an informal one. Workshop sessions should prepare mentors to address issues pertaining to the cross-cultural relations within an advising partnership. Session content might include information about the institution's history in hiring and enrolling persons of color or the official discrimination policy.

Establish peer mentoring.

Often, doctoral students of color develop valuable relationships with peers of similar cultural backgrounds because there are few other students of color within the department or even in the institution as a whole. Institutions should support the formation of graduate student clubs and organizations that promote a sense of community for doctoral students of color. These organizations may be helpful in providing an orientation to life in the local community where the institution is located, or offering advice on how to navigate the services available on campus such as the library or financial aid office. At the departmental level, advanced graduate students can lead information sessions on how to choose courses, interpret academic policies, and develop relevant study skills to succeed in the first years of doctoral study.

actions to take

- Organize departmental social events aimed at introducing faculty advisors to graduate students and their families.

- Support groups and clubs formed in the department by students of color.

- Formalize effective mentoring practices used by senior faculty within the department or across the university.

- Consult with students of color in the department on developing mentoring plans.

- Assist first-year doctoral students in finding on-campus jobs to integrate them into the campus community.
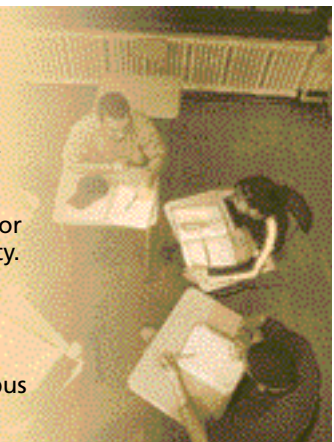
Strategy #9: Engage in Continuous Evaluation to Enhance the Institution's Capacity for Diversity.

At institutions of learning individuals are not wedded to the status quo. For an environment to be dynamic, where change is possible, an organization must continuously evaluate its various functions. Formative evaluation can provide feedback to campus constituents as diversity initiatives unfold, and can permit stakeholders to make improvements during this process. Evaluation and assessment are critical for building evidence of the importance of diversity and for showing the impact of diversity projects on an institution.

Further, data management and reporting systems should be configured to easily disaggregate information by race, ethnicity, and academic unit. Institutions should establish reporting systems so that there is a shared understanding

"Evaluation and assessment are critical for building evidence of the importance of diversity and for showing the impact of diversity projects on an institution."

campus-wide of where the institution stands in terms of the number of graduate students of color admitted, enrolled, and graduated.
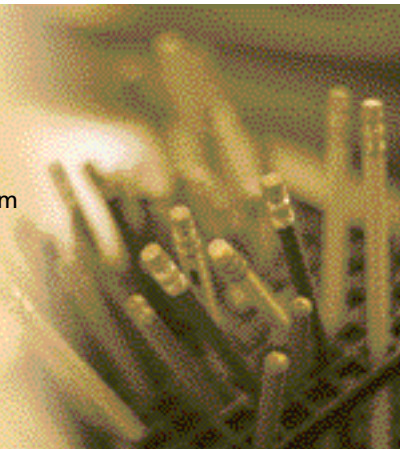
Most institutions are already required to file regular reports to the federal government (e.g., IPEDS) on student retention and hiring of faculty and staff. While these reports are available in the public domain, such reports are often only required biannually and do not distinguish professional graduate education (e.g., law, business, medicine) from doctoral education. Further steps should be taken to refine data management processes for internal use that could inform or help evaluate diversity initiatives. One ultimate objective of continuous evaluation is to produce a set of data templates from which one can gain a snapshot of the status of graduate admissions, enrollment, and degree attainment.

Finally, some institutions have a longer road to travel than others to achieve diversity in graduate education. Formative evaluation adds the necessary dimension of time to the assessment of an institution's path to diversity. Individuals must be charged not only with effecting measurable change, but with doing so within a bounded timeframe, given the environment and limited resources and competing priorities latent in the institutional setting.

actions to take

- Collect data that leads to desired outcomes.

- Focus dialogue on performance "gaps" identified from data analysis (i.e., admission, retention, graduation).

- Establish networks that include individuals from across the institution in planning evaluation.

- Share the results of evaluation with a broad spectrum of institutional stakeholders.

- Build the capacity of subunits to use data to achieve desired goals.

Improving Diversity in Graduate Education

#1 Establish benchmark institutions and criteria for diversity.

- Disaggregate admissions, retention, and graduation data by race and ethnicity, as well as by discipline and department.
- Utilize national databases such as IPEDS to obtain data on comparative institutions.
- Differentiate graduate student data for professional schools/programs from those on doctoral education.
- Redesign job descriptions for personnel in the office of institutional research to include the collection of these data.

- Allocate time each year for staff/faculty for the development of diversity data for graduate education reporting.
- Develop relationships with & recruit aggressively from the masters institutions of HBCU and the HACU.
- Form a steering committee that includes individuals affiliated with the EEOP office, the office of institutional research, & the graduate school to generate annual reports on diversity in graduate education.

#2 Know the institutional climate for all graduate students.

- Identify survey instruments used at other institutions; pilot the instruments and make appropriate revisions.
- Conduct focus groups at the departmental level to explore key

processes and mile-markers of the doctoral program.
- Collaborate with department chairs to revise relevant policies and enhance the learning environment for all students

#3 Emphasize diversity in academic leadership and institutional records.

- Consider editing the graduate school's mission statement to educate a more diverse professoriate.
- Encourage graduate deans to spearhead the formation of new committees charged with

diversifying graduate education.
- Combine internal and external institutional funds to enhance diversity.
- Hold departments accountable for progress based on plans the faculty have developed.

#4 Coordinate institution-wide diversity projects.

- Structure the position of Chief Diversity Officer with a tenure-track faculty appointment to attract and develop top candidates.

- Provide ample support staff with enough resources to hire full-time administrators.
- Provide a central office location with direct reporting to the university president or provost.

#5 Make explicit practices pervasive in doctoral education.

- Develop a co-curricular program that orients students of color to the discipline and the department.
- Provide examples of all documents related to the degree progress process and make them easily available in the department's office or doctoral student lounge.
- Form discussion groups with students approaching qualifying examinations to explicate the details and requirements of the process.

- Establish a summer writing workshop for students approaching the dissertation stage. Seek soft funding to implement the workshop.
- Organize workshops focused on grant and proposal writing for ABD students.
- Provide appropriate financial support to finance doctoral education.

#6 Professionalize the doctoral curricula.

- Invite graduate students to co-author journal articles, book chapters, and book reviews from the outset of their training.
- Encourage graduate students to present their research at national conferences.

- Support travel to and networking at national conferences for cohorts of first-year doctoral students.
- Include activities in graduate seminars for students to develop peer review and critique skills in a supportive environment.

#7 Address the placement of graduates into faculty positions.

- Develop a departmental plan that has placement as its goal.
- Encourage and support postdoctoral training for advanced doctoral students.
- Establish through the graduate student senate a travel fund for job-talk visits to institutions that

invite students, but do not fund candidate travel.
- Establish through institutional centers or institutes of teaching effectiveness a series of conferences focusing on preparing job talk presentations.

#8 Develop a systematic plan for mentoring.

- Organize departmental social events aimed at introducing faculty advisors to graduate students and their families.
- Support groups and clubs formed in the department by students of color.
- Formalize effective mentoring practices used by senior faculty

within the department or across the university.
- Consult with students of color in the department on developing mentoring plans.
- Assist first-year doctoral students in finding on-campus jobs to integrate them into the campus community.

#9 Engage in continuous evaluation to enhance the institution's capacity for diversity.

- Collect data that leads to desired outcomes.
- Focus dialogue on performance "gaps" identified from data analysis (i.e., admission, retention, graduation).
- Establish networks that include individuals from across the

institution in planning evaluation.
- Share the results of evaluation with a broad spectrum of institutional stakeholders.
- Build the capacity of subunits to use data to achieve desired goals.

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Section 4 :
Annotated
Bibliography

*T*he following provides an overview of scholarship related to diversity and reform in graduate education. Diversifying doctoral education is both an individual and organizational concern: campus decision-makers must be personally commited to institutional improvement, and institutions need to provide the context and resources to support those individuals. Indeed, there are multiple, useful references specific to diversifying graduate education. What we cite here is not an all-inclusive list of everything that might be said on graduate students and diversity, but it should be considered as a first step in informing on-going discussions about enhancing institutional capacity to diversify doctoral education.

Antony, J. (2002). Reexamining doctoral student socialization and professional development: Moving beyond the congruence and assimilation orientation. In J. Smart (Ed.), *Higher education: Handbook of theory and research, Vol. XVII* **(pp. 349-380). San Francisco: Jossey-Bass.**

In this chapter within an edited volume, the author analyzes the traditional model of socialization, which forces doctoral students to encounter psychological and emotional dissonance during the assimilation process and to become dissatisfied with their career development experiences in doctoral education. As an alternative to this model, Antony advances a three-pronged socialization framework that involves best practices for increasing numbers of women and minorities entering and graduating from Ph.D. programs.

Council of Graduate Schools. (n.d.). Retrieved May 10, 2004, from http://www.cgsnet.org/index.htm

The Council of Graduate Schools (CGS) maintains a website with information useful to those interested in diversifying graduate education. The site includes a listing of publications relevant to CGS, many of which are available by direct download.

Davidson, M., & Foster-Johnson, L. (2001). Mentoring in the preparation of graduate researchers of color. *Review of Educational Research,* ***71***(4), 549-574.

This review of literature on mentoring in doctoral education provides an understanding of cross-cultural relationships in the context of a predominately White university. Special emphasis is placed on research-based literature from the fields of education and business industry. The article makes the case that effective mentoring improves the graduate school experience of multicultural students and better positions them for postdoctoral success.

Farmer, V. (Ed.). (2003). *The black student's guide to graduate and professional school success*. **Westport, CT: Greenwood Press.**

This book is an edited collection of over eighty essays, many authored by African American senior professors and postsecondary administrators. Collectively the essays provide useful background information to help students of color make informed decisions about graduate education. The first section on navigating and professionalizing the doctoral curriculum (i.e., finding a mentor, utilizing assistantships, promoting scholarship, grant-seeking, etc.) provides the most pertinent information for diversifying doctoral education. The second and third chapters focus on establishing individual confidence to persist in graduate and professional education and are authored by students of color who are either doctoral recipients or currently enrolled in graduate education.

Hurtado, S., Milem, J., Clayton-Pedersen, A., & Allen, W. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, *21*(3), 279-302.

The article summarizes research findings resulting from a four-dimensional framework advanced by the authors: 1) an institutions' historical legacy of inclusion/exclusion of various racial/ethnic groups; 2) structural diversity, or numerical representations of various racial/ethnic groups; 3) the psychological climate (perceptions, attitudes among groups); and 4) campus inter-group behavior. The authors provide relevant policy recommendations.

Ibarra, R. (2001). *Beyond affirmative action: Reframing the context of higher education*. **Madison, WI: The University of Wisconsin Press.**

Ibarra proposes a model of "multicontextuality" that explains cultural conflict and claims to be an organizational learning-and-effectiveness model. The aim of the model is to create a more balanced institutional environment wherein individuals of different cultures (i.e., racial and ethnic) work and learn together successfully in academic organizations.

Jones, L. (Ed.). (2001). *Retaining African Americans in higher education*. **Sterling, VA: Stylus.**

This collection addresses several issues critical to retaining African Americans in higher education, including on the undergraduate, faculty, and administrator levels. Chapters cover the importance of the organization and structure of the university to achieve success in recruiting and retaining African Americans, in addition to psycho-social strategies that persons of color might adopt to excel in predominately White institutions.

Lovitts, B. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. **Lanham, MD: Rowman & Littlefield Publishers, Inc.**

Lovitts' book examines the causes and consequences of early departure from doctoral study. The author maintains that attrition results from factors that are deeply embedded in the organizational culture of graduate school and in the structure and process of graduate education. The distribution of structures is a model of contexts—institutional, disciplinary, interdepartmental, intradepartmental, and external student factors (health, family, finances)—that work together to integrate doctoral students into the graduate school experience. Graduate programs better serve under-represented students by providing them structural support.

Moody, J. (2004). *Faculty diversity: Problems and solutions*. **New York: Routledge Falmer.**

Moody illustrates the various barriers that students of color encounter that can often block their entry into and advancement within the professoriate. The author organizes the text into three sections: problems, solutions, and analyses, which illustrate the challenge of retaining faculty of color in the academy. Based on the data presented, the author maintains that majority White faculty and administrators must take remedial steps to adopt new cognitive and institutional practices to offset the political and economic advantages that benefit them, but which penalize persons of color in academia.

Nettles, M. (1990). Success in doctoral programs: Experiences of White students and students of color. *American Journal of Education, 98*(4), 494-522.

This quantitative study examines differences among African American, Latino, and White doctoral students at four major universities. The findings indicate that students of color experience discrimination, and that African Americans receive the fewest teaching or research assistantships. The author recommends more financial aid, assistantships, and compensatory intervention for doctoral students of color.

Preparing Future Faculty Program. (n.d.) Retrieved from
http://www.preparing-faculty.org

The Preparing Future Faculty Program (PFF) is a national movement to transform the way aspiring faculty members are prepared for their careers. The website offers institutions guidance in creating and managing new PFF initiatives as well as a link to PFF publications germane to diversifying graduate education. The site also links to the Council of Graduate Schools website.

Weidman, J., Twale, D., & Stein, E. (2001). *Socialization of graduate and professional students in higher education: A perilous passage?* San Francisco: John Wiley & Sons, Inc.

Socialization in graduate school refers to the processes through which individuals gain the advanced knowledge, skills, and values required for successful entry into a professional career. The authors present a conceptual model of graduate and professional student socialization, which assumes that socialization occurs through an interactive set of stages. For this model they draw from research on adult socialization, role acquisition, and career development. They propose modifying the graduate degree program and faculty and administrator roles, increasing diversity, and offering support to students.

Willie, C., Grady, M., & Hope, R. (1991). *African-Americans and the doctoral experience: Implications for policy*. New York: Teachers College Press.

This study traces the participation of 146 African American doctoral fellows, including the comparison of experiences both in predominately White and historically Black institutions. The study indicates that predominantly White institutions must make a deliberate effort to increase participation by African Americans and other students of color. The appendices include the data collection instruments the investigators used.

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Section 6:
Appendix

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