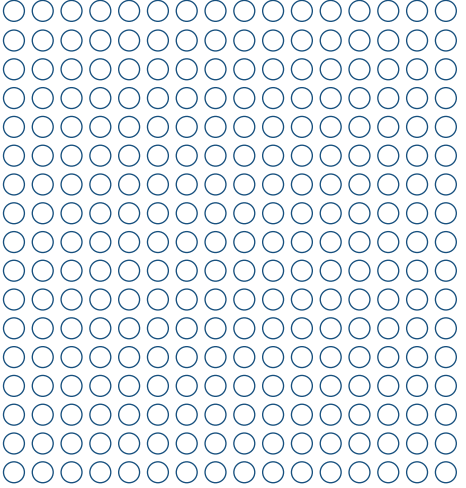
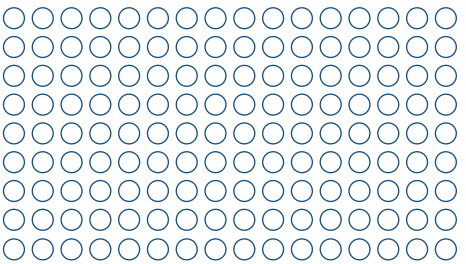
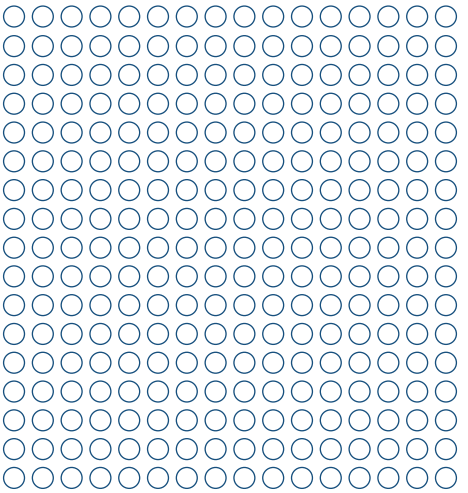


THE RESPONSIVE PH.D.

Innovations in U.S. Doctoral Education

THE WOODROW WILSON
NATIONAL FELLOWSHIP FOUNDATION
SEPTEMBER 2005





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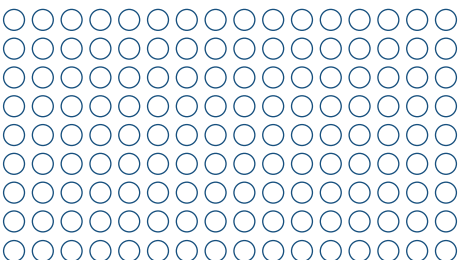

ACKNOWLEDGMENTS: The Woodrow Wilson National Fellowship Foundation wishes to thank The Pew Charitable Trusts, the Atlantic Philanthropies, the Carnegie Corporation of New York, and the Henry Luce Foundation for their generous support of the Responsive Ph.D.

An exceptional group of leaders has helped to shape the initiative. Earl Lewis, Dean of the Rackham School of Graduate Studies at Michigan at the beginning of the Responsive Ph.D., worked with the Foundation and with Robert E. Thach, Dean of the Graduate School of Arts and Sciences at Washington University in St. Louis, and Jody D. Nyquist, then Associate Dean for Professional Development at the University of Washington, to originate the Responsive Ph.D. Dr. Lewis then served as the initiative's national chair during its first three years of work. Upon his departure from Michigan to assume new duties as Provost at Emory, he was ably succeeded by a Deans' Advisory Group of Dr. Thach; Orlando L. Taylor, Vice Provost for Research and Dean of the Graduate School at Howard University; and Jon Butler, Dean of the Graduate School of Arts and Sciences at Yale University.

Others who offered the Responsive Ph.D. guidance in its early stages included Debra W. Stewart, President of the Council of Graduate Schools; Catharine R. Stimpson, Dean of the Graduate School of Arts and Science at New York University and a Trustee of the Woodrow Wilson Foundation; and George E. Walker, leader of the Carnegie Initiative on the Doctorate at the Carnegie Foundation for the Advancement of Teaching. In addition, representatives of other organizations and funders participated in the roundtables that initially created the initiative's direction; while they are too numerous to mention, their contributions were essential.

Most appreciative acknowledgment is also due the graduate deans of the 20 institutions that have been the Responsive Ph.D. First, the founding 14 deans who led the way: Maria Allison, Arizona State University; Lewis M. Siegel, Duke University; Orlando L. Taylor, Howard University; George E. Walker, then John T. Slattery, Indiana University; William B. Russel, Princeton University; William H. Parker, University of California at Irvine; Carol Lynch, then Susan Avery, University of Colorado at Boulder; Earl Lewis, then Steven L. Kunkel, University of Michigan; Peter Conn, University of Pennsylvania; Teresa Sullivan, then Victoria E. Rodriguez, University of Texas at Austin; the late Marcia Landolt, then Elizabeth Feetham, University of Washington; Martin Cadwallader, University of Wisconsin at Madison; Robert E. Thach, Washington University in St. Louis; and Susan Hockfield, then Jon Butler, Yale University. More recently, and with equal enthusiasm and insight, six additional deans at the "second wave" Responsive Ph.D. institutions: Claudia Mitchell-Kernan, University of California at Los Angeles; Clark Hulse, University of Illinois at Chicago; Richard P. Wheeler, University of Illinois at Urbana-Champaign; Jeannine Blackwell, University of Kentucky; Ronald M. Atlas, University of Louisville; Dennis G. Hall, Vanderbilt University.

Each of these leaders has also engaged colleagues in the project, making for a still longer list. Of these, however, Elaine P. Berland of Washington University merits the Responsive Ph.D.'s particular gratitude for her efforts in organizing the National Graduate Student Leadership Conferences, in conjunction with the Responsive Ph.D.

Bettina Woodford, who previously worked with Jody Nyquist on the Re-envisioning the Ph.D. Project at the University of Washington, served as program officer and primary researcher during much of the Responsive Ph.D.'s substantive work. Nancy Borkowski, program associate, led efforts to gather, compile, and present information from the various institutions on their doctoral innovations. Both authored early portions of Responsive Ph.D. materials. The principal author of this final report was Robert Weisbuch, president of the Woodrow Wilson National Fellowship Foundation, with editorial contributions by Dan McIntyre, Vice President for Administration and Program Development, and Beverly Sanford, Director of Communications, and with production assistance from Elisabeth Hulette, Program Assistant in Communications.

THE RESPONSIVE PH.D.: A PREFACE WITH FOUR PRINCIPLES

The Woodrow Wilson Foundation does not like to write reports. Typically, Woodrow Wilson translates ideas into academic practices. On doctoral education in particular, there have been too many words and too little action. That is why we were pleased to take on twin tasks for The Pew Charitable Trusts: first, to synthesize the several reports on the Ph.D. sponsored by Pew and others over the last decade; second, to enlist university partners who could begin to move the most persistent recommendations of these various studies into innovations that would affect the real lives of students and faculty.

This said, having engaged 14 (and ultimately 20) graduate schools to work on the Responsive Ph.D.—as we called our initiative—it is time to report on what they have accomplished, and on what we have learned. Since a report can be a kind of action as well, we intend, through these pages, to bring the project to all those in and beyond higher education who have a real stake in the quality of doctoral practice.

To maintain Woodrow Wilson's prejudice for action, this report is meant to be especially direct and useable. Like the overarching initiative it reflects, it has four themes, distilled from our reading of the various research reports on the state of the doctorate.

- The first theme, **new paradigms**, evolved out of a rebellion among participants against the scholarship-as-enemy implication of some of the previous studies. Scholarship, we said, is the heart of the doctorate. We should never apologize for pushing back the night. In fact, to argue that research is too much the focus of the doctorate ironically lets scholarly practice off the hook. We wanted to center the question, *What encourages or discourages truly adventurous scholarship?*

- **New practices** asks: *By what means can we make all aspects of doctoral training, including pedagogy, truly developmental?* How do we evolve from the habit of assigning our least-experienced teachers to our least-experienced students in courses the faculty has decided not to engage? But the notion of new practices also involves a revolution in the concept of service, as it seeks ways to make *the application of knowledge* beyond the academy integral to a doctoral experience.

- **New people** concerns the challenge of enlisting the entire U.S. population, including currently meagerly represented groups, in the doctoral demographic. Beyond funding, is there a way to make the sense of the doctorate more socially responsive and less abstract, white, irrelevant?

- **New partnerships** seeks an essential and continuous relationship between those who create the doctoral process and all those who employ its graduates.

Structured around these themes, this report on the Responsive Ph.D. offers a small number of recommendations, a range of means for acting on each, and some examples from the participating universities. Together, these institutions have created more than forty innovations that demonstrate the four themes.

These four themes are treated in the body of the report. Behind them, however, lie four encompassing principles, discovered through the lived experience of this effort. These principles must be stated at the outset, for they guide this presentation of the results of the Responsive Ph.D. They are the real news—and we believe they make for challenging news indeed.

PRINCIPLE ONE: A GRADUATE SCHOOL FOR REAL

The first principle of Woodrow Wilson's initiative on the doctoral degree may appear at first bizarre or tautological. Every gripe, every conclusion from all the reports and our attempts to turn the reports into action prove one thing: **the Ph.D. degree requires strong graduate schools and graduate deans with real budgets and real scope—a far stronger central administrative structure than typically exists at present.**

The doctoral degree most directly defines the research university as distinct from other institutions of higher learning; and national reputation, with all its consequences, depends in large measure on the perceived quality of graduate programs. It is an anomaly, then, that the graduate level is the very place where the central administration exerts the least quality control.

> "THE DISCIPLINES DO NOT EXIST ON SEPARATE PLANETS BUT IN A COMMON ENTERPRISE OF HUMAN KNOWING."

Yet there is a logic to this decentralization. Faculty within individual programs tend to devote a great deal of their own care to the quality of their programs; and, because the degree is research-driven, reputation is typically measured more by the impact of the faculty's research than by the lived experience of graduate students. Further, the Ph.D. degree has such a variety of meanings in different programs—the experience of a student in, say, geophysics is so different from the experience of the medieval history student—that it seems to defy any definition more specific than the notion of "highest academic degree offered," or "degree guaranteeing disciplinary expertise." Thus, while universities usually and vaguely recognize a virtue to organizing doctoral education as a whole, it is organization-lite—and wholly insufficient to evolve an institutional philosophy for the doctorate.

The structural consequences are not anomalous at all then. Graduate schools and their deanships are typically weak in identity and authority in relation to individual programs and in relation to the colleges—arts and sciences, engineering, education, and so on—that govern related disciplines and determine faculty destinies. At some universities, there is no graduate school at all; at others, the graduate deanship is combined with, and in truth much subordinated to, the position of chief research officer. Even where there is a graduate school *per se*, the dean may serve tea more often than a clear purpose; the role can appear ceremonial, a luxury, and the student experience as well as the faculty experience is almost entirely limited to the particular program.

In some ways this local control is a glory. Self-determination creates an effective incentive for faculty to devote energy to their doctoral programs. But even the best-spirited and most accomplished faculty, operating in isolation from other disciplines and from those in and beyond academic institutions who will employ their graduates, are made unhappily provincial. Habit and unacknowledged self-interest have their heyday; and the student experience, by all measures and testimonies, suffers. So too the intellectual quality and practical preparation of doctoral training, for no single discipline can develop an adequate philosophy of graduate education. The very notion of the doctorate deserves a contemplation it has never received. And this dispersion in graduate education has a negative effect on the intellectual cohesion of the university and of its people—for finally the disciplines do not exist on separate planets but on a single campus, in an ultimately common enterprise of human knowing.

The graduate deanship pilots a usefully wayward bus across the gridlines of the map of disciplines. *En route*, the deanship collects intellectual capital to create a graduate community. And a community is required, for doctoral education itself does exist, actually as well as ideally. The recent studies

reviewed at the beginning of the Responsive Ph.D. initiative all reveal common dissatisfactions—and even areas of satisfaction, always harder to acknowledge—among graduate students and faculty across widely differing disciplines.

Further, this very initiative has tested the institution of graduate school as it now exists. No one on the initiating committee was ignorant of the limitations of graduate schools and thus the limitations of an approach that would organize its work in relation to graduate schools and deans. But our collective reading of the research convinced this group that it was vital to strengthen the graduate school structure, rather than to choose a path around it.

The solution was to choose schools and deans with impressive track records. Providing only pin money as an incentive, Woodrow Wilson asked the graduate deans to participate not for funding, but out of a desire to improve quality. The result: For considerably less than $1 million, these deans have proffered 40 authentic, mostly efficacious innovations, some of them developed as elaborations of ongoing programs, some totally new. Together, they form a powerful demonstration that graduate schools work as an institution.

The graduate school ideally stands at the very center of a research university. It is where everything comes together. Graduate students imbibe the scholarly and research strategies employed by faculty while they also develop their abilities as mentors of undergraduates. Therefore the graduate school not only should be given means to govern its own programs—emphasis, *its*—in authentic rather than very junior partnership with the programs and colleges; the graduate school should become the intellectual center of the university.

> “THE DOCTORATE NEEDS TO BE OPENED TO THE WORLD AND TO ENGAGE SOCIAL CHALLENGES MORE GENEROUSLY.”

A dramatically strengthened role for the graduate school and deanship is thus the first assumption and ultimate conclusion of the Responsive Ph.D., for, without a well-designed instrument, any other recommendation will have no route to reality. And while it is clearly the case that a graduate school must find common ground with programs and colleges, it requires some of its own turf as well—a budget with a function. But more on that in the final principle.

PRINCIPLE TWO: A COSMOPOLITAN DOCTORATE

The second principle is a sibling to the first. Just as individual programs need to be connected more to each other in the shared experience of a strengthened graduate school, **the doctorate in totality and in every discipline will benefit enormously by a continuing interchange with the worlds beyond academia. The doctorate needs to be opened to the world and to engage social challenges more generously.** A responsive Ph.D. has implications for degree requirements, for the right administration of programs, for time to degree and the job search, and for improving the diversity of the Ph.D. cohort.

In terms of degree requirements, the enactment of knowledge, the application of expertise to social challenges, is a proper aspect of a superior education. We should expect holders of the highest academic degree not simply to know a great deal but to know what to do with what they know, both in the academy (teaching, for instance, is one enactment of knowledge) and beyond it.

In the realm of program administration, doctoral education gets shaped differently and more happily by instituting a continuing dialogue between the producers and the consumers of doctoral education. Any improvement in doctoral education depends utterly on the will and energy of the faculty. But those faculty decisions have effects far beyond the degree-granting research university, for many of the human products of those programs will work in very different kinds of educational places and in government, business, cultural institutions, and nonprofits. Hence the nature and quality of doctoral education is hardly the province of the faculty alone. But to charge the faculty with ill will or recalcitrance, as some of the reports tend to do, is wildly unfair, for when has the faculty been invited to engage in this enlarged conversation? The Responsive Ph.D. seeks to establish, discipline by discipline and for graduate education as a whole, a conversation that has never taken place, so that decisions concerning doctoral practice can be based on an authentic fullness of perspective. Experience, in this initiative and in other efforts, suggests that the faculty greets such opportunities warmly.

> "IN DISCIPLINES LIKE HISTORY AND ENGLISH, FEW PH.D. RECIPIENTS END UP AS TENURE-TRACK FACULTY."

Where careers are concerned, an active partnership among interested parties—everyone from the entire professoriate (including colleagues at small colleges, four-year comprehensives, and community colleges) to leaders in business, government, cultural institutions, and the schools—creates an additional benefit. It encourages a more creative approach to careers. The misnamed problem of time-to-degree can be solved only when graduate students are helped to understand better the full range of career possibilities opened to them by their graduate training.

The problem of a ridiculously long and costly number of years for earning the doctorate has many components, including an inertial tendency to require more and more, as if the doctorate is the last stage of knowing rather than a moment that leads beyond itself. It is also the case, however, that time-to-degree is longest in those fields where academic job prospects are poorest. In disciplines like history and English, typically only a few Ph.D. recipients—indeed, as few as two out of every ten—will end up as tenure-track faculty at research universities or selective small colleges. Why leave, then, when there is nowhere to go?

Yet there are plenty of places to go if doctoral graduates are encouraged to interpret their abilities more knowingly and if faculty do not consider their only successful students as those who are clones of themselves. Graduate students will linger no longer in their low but safe economic state if they perceive a next place to go, and the new graduate school, working with the university career center, alumni office, and regional organizations and businesses, can create this better map.

Finally, in addressing the urgent need for a more diverse doctoral population, a more socially responsive Ph.D. can serve as a worthy goad to attract a greater number of students of color. Study after study shows that minority students and faculty have a stronger desire to bring their learning into the community than their non-minority peers. To the extent that the doctorate becomes more cosmopolitan—yes, by reaching out to the schools and community colleges instead of lazily recruiting from a B.A. cohort that has already lost a huge number of extremely capable African-American, Hispanic-American, and Native-American students, *but also* by reconceiving the disciplines at the doctoral level with a keener eye to the many ways in which knowledge can be enacted—the appeal to students of color will be strengthened.

Learning for its own pure sake, the "truth value" of things, is a key principle of academia; but when that ideal makes a virtue out of ignoring the world, the necessary and occasional autonomy of deep research becomes a highly dubious virtue. The Responsive Ph.D.'s initiating committee learned from the various studies reviewed, and then learned emphatically again from the various innovations the partner institutions put forth, how greatly students and many faculty long for a more generous concept of their disciplines, one that will make learning less insular to the academy. It is certainly an important traditional role of academia to critique social realities, but that idea has the danger of implying that social realities are up to others to construct. It is also the role of academia, and especially of the highest academic degree with its implication of expertise, to constitute reality.

PRINCIPLE THREE: DRAWN FROM THE BREADTH OF THE POPULACE

For reasons of both equity and efficacy, doctoral education should capitalize upon the full human resources of its populace. This is very far from the case at present in the United States. For instance, only 7 percent of all arts-and-sciences Ph.D.s awarded by U.S. institutions in 2003 were awarded to U.S. citizens who are African-American or of Hispanic origin, where 32 percent of all Americans in the likeliest age bracket for doctoral candidates (ages 25 to 40) are members of those two groups.

Clearly, an expertise gap besets the United States. The Ph.D. cohort, source of the nation's college and university faculty, is not changing quickly enough to reflect the diversity of the nation. The next generation of college students will include dramatically more students of color, but their teachers will remain overwhelmingly white.

This expertise gap extends beyond the professoriate. It is also diminishing our national leadership in any number of professional endeavors, from determining economic policy to designing museums to inventing new pharmaceuticals. The Ph.D.s who lead the way in the world of thought and discovery are far more monochromatic than the population as a whole. In all, if diversity matters, it matters greatly at the doctoral level. Therefore, attracting, cultivating, and retaining a larger next generation of Ph.D.s of color must become still more of a priority for graduate schools.

In recognition of this conviction shared by the Responsive Ph.D. universities, the initiative organized a sub-project to address its "new people" theme. With support from the Andrew W. Mellon Foundation and the Atlantic Philanthropies, two Responsive Ph.D. meetings—in May 2001 and November 2001—addressed the topic of diversity in doctoral education, convening leaders of several of the national initiatives to recruit and retain doctoral students of color. At the second of these meetings, it became clear that no ready guide existed to help observers understand the nature and variety of diversity efforts in doctoral education. Participants also learned that such meetings are extremely rare, that information-sharing is negligible, and that worthy assessments are few. While many agencies and funders continue to work hard on these issues, no one entity has a larger perspective on what kind of efforts work, nor have the various initiatives taught each other what they do know.

> "A LARGER NEXT GENERATION OF PH.D.S OF COLOR MUST BECOME STILL MORE OF A PRIORITY."

As a result of these meetings, the Woodrow Wilson Foundation undertook to survey existing national programs that recruit and retain doctoral students of color, to find out what was known about their

effectiveness, and to see how well they fit together as a system. To accomplish this task, Woodrow Wilson staff carried out lengthy written and oral interviews with the managers of 13 nationwide programs intended by government agencies and private foundations to bolster doctoral diversity in the arts and sciences. Notably, the study did *not* try to include similar university-based programs, one area (among many others related to doctoral diversity) that requires further research. Interviews sought managers' descriptions of their specific program goals and of how their programs sought to meet those goals; elicited their sense of the strengths and weaknesses of their programs; and asked how they assessed the relative success of their own efforts.

Not surprisingly, the interviews revealed a number of circumstances that increasingly impede the work of doctoral recruitment and retention programs. Chief among these: the chilling effect of recent court challenges to affirmative action; reduced fellowship support; reduced visibility; limited communication among programs; and too little encouragement in the earlier stages of education for minority students to consider doctoral education.

Based on this study, the Woodrow Wilson Foundation has published a report, *Diversity and the Ph.D.*, that offers seven major recommendations:

1. To foster communication, create an active consortium of organizations committed to greater doctoral diversity. Graduate schools must be centrally represented in such a group.
2. Develop better data, particularly longitudinal data—an area in which doctoral education by nature and graduate schools by administrative bent are well positioned—to make it clearer what kinds of interventions truly work in recruiting and retaining Ph.D. candidates of color.
3. Ally doctoral education with K–12 reform efforts, so that students learn early about advanced degrees, and with community colleges, which serve a large population of students of color.
4. Again, make the image of the doctorate, discipline by discipline, less insular and more socially engaged, in ways that do not compromise but rather enrich scholarly integrity.
5. Provide practical mentoring and professionalizing experiences—for all students, but especially for students of color, for whom mentoring has proven a particularly effective support.
6. Avoid substituting such criteria as need or "first in family" for race, and instead, wherever possible, treat race and need together to focus assistance where it is most needed.
7. Work closely with the same federal agencies that call for inclusiveness to seek and urge their guidance and assistance in support of these mandates.

To be sure, several of these recommendations address issues that exceed the scope of a single graduate school's resources and influence. Graduate schools must nonetheless take every opportunity to act as a more central, unified, and definitive presence in the larger institutional, state, and federal arenas in which questions of support and financial assistance are decided.

PRINCIPLE FOUR: AN ASSESSED EXCELLENCE

The doctoral degree stakes a strong claim upon quality. Whatever the degree variously means, it guarantees that. And yet doctoral education, keen to interpret all phenomena expertly, almost entirely fails to interpret and evaluate itself. **The quality of doctoral education depends upon assessment with reasonable consequences. Excellence is a receding horizon. Progress toward it is measured by**

the degree of success in achieving concrete objectives—objectives that can be redefined as circumstances require. Attainment of specific objectives can be rewarded through commensurate increases in valued resources. Numerous participants in the Responsive Ph.D. have established robust programs for connecting resources to outcomes in this way. *(See page 11 for examples.)*

To be meaningful, evaluation must occur in two places: within programs and across them—that is, at the level of the graduate school. And this assessment must have teeth, in determining such matters as university-assigned enrollments, fellowship funds, and departmental resources. But such overall assessment by the graduate school requires a bidirectional approach, whereby programs not only provide information but respond beyond the data, including when the data may be misleading. Good assessment, then, promotes a dialogue between program, college, and graduate school. Further, assessment is not something that happens only *after* a program is completed, or after a cohort of students has graduated; it takes place throughout the planning and conduct of a graduate program, and should be designed into every stage. Understood rightly, assessment clarifies initial goals, seeks maximum feedback at every stage of the doctoral experience from all concerned, and evaluates outcomes unflinchingly and with expert understanding.

> "THE DOCTORAL DEGREE STAKES A CLAIM UPON QUALITY, YET DOCTORAL EDUCATION FAILS TO INTERPRET AND EVALUATE ITSELF."

Assessment looms large in public education, makes a strong appearance in college tenure cases, serves as a near-constant in the various testings of graduate students, but makes only the rarest and faintest appearance in graduate programs. Reputational rankings, rendered every ten or fifteen years by NRC and more frequently by a popular magazine, make a sensationalized splash; but calm, local, continuous evaluation of programs by carefully conceived rubrics barely exists. Programs are frequently left free to admit too large a number of undersupported students; free to fail to learn from each other's successes; free to become deafened to students' responses to their educational experiences.

Again, this absence of assessment is in part a symptom of what is also a partial virtue, the decentralized nature of doctoral education. It also results from faculty resistance, often justified, to reductive and ultimately misleading measures of educational quality. The need is clear: doctorate-granting departments and programs, working with their graduate deans, need to develop knowable and substantive measures of success. Assessment can and must engage faculty in a profound self-study as to the nature of their discipline and the purposes of graduate education—not as an abstract subject but in reflection upon actual practice; and this engagement should be a continuing aspect of doctoral life, not a solitary event.

ACTION AGENDA FOR THE FUTURE

From these same convictions about the importance of action-oriented research and practical application comes the publication of this report. Its chief aims: to set forth a clear and workable synthesis of findings about the current needs in doctoral education; to promote the concrete possibilities for addressing these needs that our partners' Responsive Ph.D. innovations exemplify; and to encourage the adoption of these innovations by a broader range of institutions.

The Woodrow Wilson Foundation means to keep encouraging and engaging in the specific efforts we are calling for. Recent examples of this commitment:

- The spring 2005 release of *Diversity and the Ph.D.*—a focused examination of the Responsive Ph.D.'s "new people" theme—has laid some groundwork for the further development of research and resources, and for a renewed effort among all parties concerned about increasing diversity in doctoral education.
- In June 2005, 50 graduate deans, representatives of national associations, and funders of graduate education initiatives gathered for a Responsive Ph.D. conference in Princeton. Presenting an overview of work encouraged and supported by the initiative to date, they exchanged ideas about ways to adopt and refine each other's efforts on campuses nationwide.
- The fall 2005 National Conference on Graduate Student Leadership will once again elicit graduate students' perspectives on improvements to doctoral education. Like the first such conference in October 2003—a spin-off from the Responsive Ph.D. co-sponsored by Woodrow Wilson and Washington University in St. Louis—this upcoming event will convene teams of graduate students and graduate administrators from the Responsive Ph.D. institutions to discuss issues of concern to Ph.D. students. The goal: to turn up the volume for the voices of graduate students themselves.

Like these other related efforts, we hope that this present report will encourage activity, not substitute for it. This published outcome, from a nationwide project with total funding of less than seven figures, offers yet another sign to those who have become skeptical of funding higher education: When a national program is aligned with local goals, higher education can deliver. Doctoral education, often perceived as that least moveable object, can in particular deliver.

At the June 2005 conference of graduate deans and others, the participants identified four key priorities to drive ongoing efforts:

- Increase diversity in graduate education and the professoriate by dealing with "leakages and blockages" in the K–12 pipeline (including community colleges) and encouraging progress up the tenure ladder for young faculty of color;
- Seek new ways to apply academic knowledge to social challenges and promote public scholarship;
- Address the globalization of doctoral education, clarifying the role of U.S. doctoral institutions in the emerging international market, developing common standards, and collaborating with foreign counterparts; and
- Improve professional development of doctoral students in a full range of careers, tracking their success as scholars, teachers, and practitioners in a variety of sectors.

These are priorities that the Woodrow Wilson Foundation will continue to take to heart as it considers and reshapes the Responsive Ph.D. for new efforts yet to come. And these efforts will come—indeed, are already under way at universities nationwide as they take up the challenges facing the 21st century American Ph.D.

In sum, the following pages are intended not as a further sermon but as a toolkit. The Responsive Ph.D. will assess itself finally not by the wisdom of its words, but by what it achieves for students and faculty in the flesh—by what it achieves in encouraging them to become more responsive to a world urgently real. The Responsive Ph.D. begins, then, when the language ends.

ABOUT THE RESPONSIVE PH.D.: PROGRAM DESCRIPTION AND PURPOSES[1]

Woodrow Wilson took from The Pew Charitable Trusts the task of deriving four basic themes from studies funded by Pew, as well as other foundations and organizations; translating their findings into answering practices; and sharpening recommendations for action.[2] Institutional change is at the heart of the initiative, which aims to identify good models of innovation and promulgate them nationally. For this daunting effort we chose graduate schools as partners, attempting to achieve a diversity of institutions with respect to geography, public or private status, and resources and history. The network of institutions has become more and more inclusive as it has developed. The graduate schools that served as founding members of the Responsive Ph.D.—and all those subsequently invited to participate—were selected for their activist records, as well as the breadth and quality of their doctoral degree programs across the arts and sciences.

Among these graduate schools, the project team sought to identify a range of demonstration projects or experiments, elicit comments on what works and what doesn't, and stimulate evolution in the deans' thinking, enabling them to build on reforms they had already begun. To advance this process, Woodrow Wilson sponsored Responsive Ph.D. roundtables on each of the campuses of the initial 14 partner universities. (The six partners that have since joined the effort have also hosted their own campus meetings.) Teams of faculty, students, administrators, and business and community leaders assembled, under the auspices of the graduate schools, to consider local changes made in the doctorate, discover new priorities, and propose new strategies. Roundtable participants emerged, often after several follow-up sessions, with action plans. They then shared their proposals with department chairs, graduate student groups, other faculty, and provosts. And, to encourage a crossfertilization of ideas, the Foundation brought the 14 graduate deans together twice. The Foundation drew upon both existing research on the Ph.D. and the experience of these partner universities—their sense of what works and what matters—to synthesize the various conversations and findings about doctoral education into a shared national agenda.

The Responsive Ph.D. Universities

* Arizona State University
* Duke University
* Howard University
* Indiana University
* Princeton University
* University of California at Irvine
  University of California at Los Angeles
* University of Colorado at Boulder
  University of Illinois at Chicago
  University of Illinois at Urbana-Champaign
  University of Kentucky
  University of Louisville
* University of Michigan
* University of Pennsylvania
* University of Texas at Austin
* University of Washington
* University of Wisconsin at Madison
  Vanderbilt University
* Washington University in St. Louis
* Yale University

* *One of 14 founding member institutions.*

1. An early, summary version of this report appeared as "Toward a Responsive Ph.D.: New Partnerships, Paradigms, Practices, and People" in *Paths to the Professoriate,* Donald H. Wulff and Ann E. Austin, eds. (San Francisco: Jossey-Bass, 2004). Copyright © 2004, John Wiley & Sons, Inc. Reprinted with permission of John Wiley & Sons, Inc.

2. For a listing of the full range of inquiries conducted over the last decade, from individual studies to research commissioned by government and educational agencies, see the Responsive Ph.D. Initiative's resources Web page: http://www.woodrow.org/responsivephd/responsive_phd.html.

THEMES AND RESULTING STRATEGIES

Together, the Foundation and its partners developed four themes to ground the Responsive Ph.D. initiative: *New Partnerships; New Paradigms; New Practices; and New People*. The first, a set of structural principles, might be less truly a theme than an underlying foundation for the other three. When doctoral education gets that one wrong, work on the other three goes for nothing.

NEW PARTNERSHIPS

The *New Partnerships* portion of the Responsive Ph.D. promotes more active partnerships with constituencies both within and beyond the university. Fundamentally, this emphasis of the project has concerned itself with how the doctorate gets built. The first step: acknowledging the decentralized nature of the Ph.D., the United States' most balkanized and least regularly evaluated level of education. The passionate commitment of the faculty to this level of education unquestionably depends on local control. But *so* much and *so* local, so without the voices of constituencies from outside the departmental lounge?

Many doctoral programs manage themselves wonderfully well. But in general, when governance is lacking—and particularly when all constituents' interests are not represented—habit rules and self-interest lurks. When a group, like an individual, speaks only to itself, it is a sign of dementia. But to assume the recalcitrance of faculty to engage in improving doctoral education, as some of the studies appear to do, is wildly unfair—for when has the faculty been invited to consider even these findings, much less to engage in a thorough and rigorous but un-guilty self-examination? On one hand, the faculty makes the decisions. Any improvement in doctoral education depends utterly on the will and energy of the faculty. No imposition from outside can do more than play at the edges. On the other hand, those faculty decisions have effects far beyond the faculty and its degree-granting institution, for many of the human products of those programs end up working not only in very different kinds of educational places but also in business and government. Thus the nature and quality of doctoral education is hardly the concern of the graduate faculty alone. Jody Nyquist's Re-envisioning the Ph.D. project represented, for the first time, the views of all those who are crucially affected by the practice of doctoral education. That effort initiated a first dialogue between the producers and consumers, so to speak, of doctoral graduates—including doctoral students themselves. The Responsive Ph.D. seeks above all to make that type of dialogue local and constant, so that decisions concerning doctoral practice can be based on an authentic range of perspectives.

To achieve that kind of informed policy-making requires far more than the occasional goodspirited meeting. It requires an active partnership among interested parties—everyone from the entire range of educational institutions, as well as leaders in business, government, cultural institutions, and K–12 schools.

The Woodrow Wilson Foundation tried this approach in another initiative, the Humanities at Work, seeking to extend the reach of these supposedly insular disciplines beyond the academy into social realms. There, the results for all concerned have been life-changing. Postures literally straighten when one says to graduate students in the humanities, "Three months from now you, on average, will have an offer to teach part-time at a college in a part of the country where you don't really want to be. Or you can have that offer and three others from A.T. Kearney, Microsoft, and the National Park Service." In saying that, we acknowledge that many of our colleagues might well have chosen the lousy academic

job, but it would have been by choice, and that would have made all the difference. Faculty in these disciplines are actually and increasingly welcoming of this perspective, for it suggests that these disciplines can serve not merely to critique reality but to constitute it. The kinds of largely untried partnerships imagined in the Responsive Ph.D. can be full of dangers and replete with missteps. But to the extent that the initiative's partner institutions have experimented with this approach, the results have proven powerful. *(See sidebar, next page, for examples.)* Moreover, the faculty has participated without much defensiveness and shown an impressive capacity for change. "Order me and I will fight you to the death," one faculty member wrote. "Invite my expertise and there is nothing I won't do for you."

> FACULTY INCREASINGLY WELCOME THE SUGGESTION THAT THE HUMANITIES SERVE NOT MERELY TO CRITIQUE REALITY BUT TO CONSTITUTE IT.

The very process of this initiative seeks to practice what it preaches. Deans meet with a range of faculty and students at each of their campuses and then with each other. They also meet with a far larger number of representatives from the sectors beyond the research university. Interestingly enough, action proposals from the universities and the other sources—from business to K–12—showed surprising degrees of overlap. Another notable development: The graduate deans, in part as a result of these experiences, have begun to convene local councils with students, faculty, and their own alumni representatives from business, government, and a real range of educational institutions. What gets said in these expanded conversations? There is a deep theme reflected in the name of the project. Here are some piquant samples from that first new conversation as reported in Nyquist and Woodford's (2000) summary of concerns informing the Re-envisioning project.

- **Research university faculty member:** "There is resistance to understanding that everyone who gets a doctorate isn't going to be emulating the mentor's career. We as faculty need to be creative about letting our students see a broader range of life and career opportunities."
- **Urban college dean:** "Our new faculty members do not understand students for whom school comes after family and job. Sometimes I don't think they even like this type of student, but they represent our livelihood."
- **Graduate student:** "The academic environment is still very insular. And our society is not insular, and people who are well prepared should have a multitude of experiences and interactions with people in different sectors. And that's still not happening, it's still not there. And it's desperately needed."
- **Business leader:** "You develop vision by climbing hills…so you actually recognize there's much more to see than you've been looking at."
- **Business leader:** "Graduate education…needs to skate to where the puck is."

Even if, like a number of the adventurous scholar-leaders in the Responsive Ph.D., you believe that graduate education also sometimes requires skating to where the puck is *not*, there is a consensus here worth minding. It was made into a parable by a young faculty member at a Woodrow Wilson forum: "It's as if they spent years training me to know everything about the roller coaster. But now I'm in charge of the whole amusement park. I need to know about safety and publicity and all the other rides. No one had taught me about them…no one had even told me they existed."

NEW PARTNERSHIPS

Connecting the Community: Institute on the Public Humanities

University of Washington

A weeklong institute engages 25 doctoral students, competitively selected from across the humanities, in both scholarship on cultural democracy and first-hand examinations of campus/community partnerships. Architects of programs engaged in public scholarship act as speakers, resources, and discussion leaders. Students work together in small teams to imagine how their research might connect with a larger public, and to design a project in the public humanities.

Entrepreneurship Course

University of Texas at Austin

This credit-bearing course, offered each summer for master's and doctoral students across all disciplines, helps students envision creative ways to apply their intellectual training and expertise, whether to scholarship, the community, the corporate world, or other arenas. During the course, students identify a particular impact they want to have and then develop their vision into a viable venture through marketing research, teamwork and collaboration, venture/business planning, effective presentations, and resource development.

Center for the Humanities and Arts Internship Program

University of Colorado at Boulder

The Humanities Internship Program places humanities graduate students into internships outside the academy, where they can transfer academic skills and scholarly expertise to new settings. The internships also inform the corporate, government, and nonprofit employers who participate in the program of the value of an advanced humanities degree. Internship positions must offer professional opportunities, consist of tasks worthy of an advanced doctoral student, and pay a reasonable rate (equivalent to an assistant professor's salary).

The K-Through-Infinity (KTI) Professional Development Systemic Initiative

University of Wisconsin at Madison

KTI provides a fellowship and training opportunity for doctoral students in science, technology, engineering, and mathematics to serve as resources in K–12 schools while enriching their own graduate education. Teams of fellows, teachers, school district administrators, and (in some cases) university researchers work on curricular and pedagogical initiatives for one to three years. All fellows regularly work with students in classrooms and participate in meetings with school district liaisons, in-service events, and professional development seminars arranged by the school district and university.

Career Goal Setting Workshop Series: Preparing Future Professionals

Arizona State University

This three-part workshop series, which attracts primarily third- and fourth-year doctoral students, helps doctoral students explore career paths beyond the academy. Two versions are offered: one for humanities and social science students, one for physical/life sciences and engineering students. The small sessions emphasize interactive and field-based assignments that help Ph.D. students assess their values, professional interests, and work styles; experiment with strategies to identify desirable professional fields and contacts; and develop a manageable career action plan.

The Responsive Ph.D. does not mean letting the tail wag the dog, does not mean that doctoral education needs to respond to every immediate social challenge. But it does mean to let the dog out of the cage—it means, that is, to extend the reach (and, to make it two-way, the responsiveness) of academic learning. To accomplish such an enlargement, the disciplines need not sacrifice their occasional distance from the immediate social noise, a removal sometimes required for far-flung thought; but they do need to become more worldly—responsive in those ways that make them humanly worthy in the first place.

That, the experience of the Responsive Ph.D. suggests, is where the dialogue between the producers, consumers, and recipients of doctoral education is leading. Others will interpret the conversation differently, and it will take unexpected turns as it develops over the decades. But whatever the conclusions and whatever actions may be pursuant to them, by creating this dialogue the graduate school comes to exist more fully. Faculty hear colleagues in distant disciplines, as well as doctoral students in their own programs, for the first time. Those alums previously loyal solely to the specific program they attended now become university citizens in a far larger community. From a solo to a chorus, from cacophony to some harmony—if the Responsive Ph.D. could achieve any single thing, making this expanded decision-making a national norm would be the easy choice.

NEW PARADIGMS

As has become clear in the course of this initiative, however, it is unnecessary to choose a single focus from among the key emphases of the Responsive Ph.D., for each theme—partnerships, paradigms, practices, and people—implicates the rest. *New Paradigms*, for instance, concerns promoting truly adventuresome scholarship and connections across disciplines while preserving rigor. Yet this theme is the close companion of *New Partnerships*, for the nature of scholarship depends crucially upon the opportunities for outreach and ingress. (Just so, its enactment includes the issues of teaching and the applications of knowledge that *New Practices* treats. And its subjects and methods depend in real part upon the nature of its practitioners, or *New People*.) Still, despite this interconnection of themes, the Responsive Ph.D.'s initial reviews of the literature made it clear that doctoral scholarship, as a paradigm, required treatment as its own area of concern.

Many doctoral initiatives appear to view scholarly research as the Evil Empire, overwhelming other concerns. In fact, there is no reason to apologize for the fact that scholarship is the soul of the Ph.D. In doctoral education, a person on fire with an interest gets the go-ahead to take that interest to its limit, to engage with mystery and seek to make our world more habitable and rich. Scholarship is also the content of teaching and its formal identity, given that teaching is finally about strategies for discovery. Research is that without which the doctorate is a ringer. Anything that might dilute a student's passionate immersion in a discipline should be refused—anything as in anything.

But one can be fierce against dilution and yet intrigued by dilation, by a more generous opening out of learning, by new paradigms of scholarship. Can we—in the nice phrase of Bruce Alberts, president of the National Academy of Sciences—learn to cross the T, to add breadth to depth? As another business leader quoted by Jody Nyquist said, "The sin is that people get the impression that going narrow and deep is the essence of the doctorate, but the essence is really trying to be critical and original and to do things on your own. We need people who are intellectually adventurous."

By making scholarship the enemy, some critics of doctoral education overlook a questioning of scholarly practice. For it is not the case that everything is fine in regard to scholarship and research training. Instead, the Responsive Ph.D. asks: In each discipline and among them, what encourages adventurous scholarship? What retards and discourages it?

To get at answers, each discipline must do something very difficult, must come to comprehend that its practices are a matter of choice rather than nature. Each discipline has its own anthropology, and it can become self-comprehending only by seeing itself in relation to other tribes. For example, when we look at two extremes of mentorship—the practice in the humanities and some of the social sciences for a dissertation advisor to meet with a student perhaps once a month, and the very different life of the science and engineering laboratories, where professor and student interact daily—we give each a chance to see a different possibility and to learn newly about itself, about how dangerously *laissez faire* the dissertation process can become in the humanities, about how prematurely narrowing and overdetermining the life of the laboratory may be. Beyond looking around at each other, there is the question of working together. Interdisciplinarity is universally praised for sponsoring adventurous learning and just as universally underfunded. Its many forms are also woefully underassessed.[3] Cherry-pie virtue turns to cherry-bomb warfare as the departments and interdepartmental programs battle over rights and faculty. How a university administers the interdisciplinary in relation to the disciplines remains one of the most fraught problems, economic and academic at once.

> "WE NEED PEOPLE WHO ARE INTELLECTUALLY ADVENTUROUS."

But further, bland praise of the interdisciplinary sacrifices intellectual opportunities of key import. The interdisciplinary often arises because the world beyond academia needs something that crosses the academic boundaries or because a scholar in one discipline is led by her research to questions that land her beyond the line. This is a freshening moment; it is the very history of knowledge in the making. But some such moments may be unique (some may even be unfortunate!) while others are endemic. The deeply contentious nature of the interdisciplinary—it seeks, after all, a reorganization of knowledge—should lead to very exciting debate, allowing the traditional disciplines a new understanding of themselves in the process. And the variety of this genre, ranging from a single individual's perspective to the very different circumstance of a multidisciplinary group to which each individual brings a disciplinary perspective, barely gets acknowledged.

The interdisciplinary, then, is a special concern of *New Paradigms*. Most graduate students (six in ten) desire collaboration across disciplinary lines, while only 27 percent believe their programs prepare them for the possibility (Golde & Dore, 2001). And among 6,000 graduates interviewed ten years after earning the doctorate, "The number-one-ranked recommendation was to maintain an interdisciplinary focus, to go for breadth" (Nerad, 2000). The universities of the Responsive Ph.D. already had responded most actively to this concern. *(See sidebar for examples.)* Michigan's May Seminars bring together students and faculty on a common theme from across the disciplines. At Washington University, dissertating students meet through the summer to learn new crossdisciplinary communication skills.

3. The careful discussions and assessments conducted by The Henry R. Luce Foundation, sponsor of a number of interdisciplinary professorships at various universities, are an important exception to this rule.

Arizona State offers special fellowships to encourage interdisciplinary dissertations and Duke allows students to take courses toward a cognate master's degree at no charge. A large number of universities now are inhabited by the National Science Foundation's highly innovative Integrative Graduate Education, Research and Teaching (IGERT) program, which is furiously multidisciplinary to real effect.

NEW PARADIGMS

Exhibit and Exchange (E2) Student Lecture Series

University of Pennsylvania

In the E2 series, individual graduate and professional students present their research to an audience of peers in the setting of a campus-wide Graduate Student Center dedicated solely to crossdisciplinary graduate student use. Through these presentations, students can solicit feedback on ongoing research, practice a job talk, or rehearse an upcoming conference presentation. The series also provides a forum for graduate students to learn about research done by their peers in all disciplines.

Millennium Interdisciplinary Dissertation Fellowships

Arizona State University

Through its Graduate Dean's Advisory Council, ASU has raised funds for two Millennium Interdisciplinary Dissertation Fellowships at $15,000 each. Applicants for the Millennium Interdisciplinary Dissertation Fellowship must be engaged in interdisciplinary research that is co-directed by two doctoral mentors from different disciplines. The students must present a well-articulated problem and approach with a clear explanation of why one disciplinary approach will not suffice, and they must have already defended their dissertation proposal.

Summer Web Workshop Series

Washington University in St. Louis

These workshops offer doctoral students in the arts and sciences interdisciplinary training in the use of Web-based presentation and instructional technologies. Designed and taught by recipients of a teaching and technology fellowship award, these sessions cultivate advanced public communication and technical skills that enable advanced doctoral students to communicate their dissertation research to nonspecialists. But no graduate dean would claim yet to have capitalized fully on the opportunities. And it is here that the graduate school has a huge opportunity—for where else will the questioning, the assessing, the mixing and matching occur?

NEW PRACTICES

To put it plainly, *New Practices* concerns teaching and service, which really mean the application of expertise in the broader society. Service, one might laugh—that lame notion, the joke-category in tenure decisions? But in fact both terms require rejuvenation, for reducing the preparation of graduate students as educators to the status of teaching is to impoverish the issue.

But begin with just plain teaching. In most programs, graduate students teach what the faculty does not wish to teach—introductory composition, language instruction, calculus, whatever else gets

dubbed (going again to the other abused term) a service course. In many of the science and engineering disciplines, teaching is what a student does to stay alive if no research fellowship comes through. These practices imply to the next generation of teacher-scholars a disastrous notion of the worth of pedagogy. And a disheartening 63 percent of respondents report "their program or institution does not carefully supervise teaching assistants to help them improve their teaching skills" (Davis & Fiske, 1999, p. 4).

To be ashamed of this lack of regard for teaching is not a bad first step. But it is no solution for the economic issues that have contributed to the practice whereby the least-experienced faculty teach the least-experienced undergraduates. How might departments re-deploy their current resources to provide a progressive set of pedagogical experiences for doctoral students? We're looking for success stories and we mean to retell them compellingly. One particularly promising tactic at Duke University requires of each program a plan for such a developmental set of teaching experiences as a requisite for departmental funding.

> "THAT IT IS CONTROVERSIAL TO SUGGEST ROLES FOR DOCTORAL GRADUATES IN K–12 EDUCATION ONLY SIGNALS THE TERRIBLE GAP BETWEEN HIGHER EDUCATION AND K–12."

But beyond teaching—and beyond the myriad of activities like creating a curriculum or mentoring individual students or inventing courses that are included in the expansive term "pedagogy"—it seems fair to say that doctoral education traditionally has included virtually no learning about the educational landscape. Most doctoral students have spent their young lives at privileged institutions and most will work elsewhere even if they stay in academia. (It is wildly controversial to suggest that there are important roles for doctoral graduates in K–12 education and that very controversy only signals the terrible gap—more absolute in the United States than in any other country—between higher and public education.) The fact that we award the highest degree to students so often educationally illiterate is simply weird. It is an anomaly that both the Preparing Future Faculty program and the National Science Foundation's GK–12 initiatives have tackled with some success. But we are far from that norm where doctoral students would routinely experience a spectrum of teaching experiences. As Chris Golde and Tim Dore report, "There is a three-way mismatch…between the purpose of doctoral education, aspirations of the students, and the realities of their careers—within and outside academia. The result: Students are not well prepared to assume the faculty positions that are available, nor do they have a clear concept of their suitability for work outside of research" (Golde & Dore, 2001, p. 5).

Teaching beyond all classrooms anywhere is a definition that might provide some life to the tired notion of service. Service has come often to mean nothing more than participation on university committees, where it might more rightly connote the rigorous application of knowledge to the social sphere. The next generation wants the opportunity. Among doctoral students attending the 2003 National Conference on Graduate Student Leadership, social responsibility emerged as the top agenda item. (NCGSL, 2003) Over half of doctoral students want to provide community service while less than one in five report being prepared to do so (Golde & Dore, 2001). The University of California at Irvine runs a set of programs called the Humanities Out There (H.O.T.), which

reaches out, in practical and inspiring ways, to the schools and to cultural institutions at large. Several of our Responsive Ph.D. universities—Yale University, Washington University in St. Louis, the University of Pennsylvania—have created graduate career offices that, for a first time, provide expert advice to graduate students so that they can be more creative in considering their options. The University of Colorado at Boulder's Windows on the World and Arizona State University's Preparing Future Professionals program (also the umbrella for the previously mentioned career workshops) both bring together alumni and current students with faculty to encourage a new, extra-academic reach for the disciplines. *(See sidebar, next page.)*

Our own experience at Woodrow Wilson indicates that students benefit immensely when faculty no longer conceive of themselves as guiding the next generation of teacher-scholars but as guiding the next generation of intellectual leaders, some of whom may become teacher-scholars. In the Humanities at Work effort, 40 corporations and cultural institutions proved willing to hire doctoral graduates in positions that would employ their training meaningfully. Think what each university might do in this regard by working with alumni and regional businesses and nonprofits! But more tellingly, the Foundation also gave small stipends, through its Practicum Grant program, to current doctoral students who wished to apply their learning to extra-academic venues for a summer. A student in American studies writing on the Latino Arts movement of the 1960's found a graphic-arts cooperative in East Los Angeles that had valuable documents it did not know it possessed. He created archives and launched a citywide exhibit. An anthropology student at the University of Texas worked in a home for delinquent girls abused as children. She applied everything apt from her discipline—dance, autobiographical writing, folklore—to help these young women to improve their images of themselves. A comparative literature student worked with lawyers in Washington on a war against hate literature; a philosophy student worked in his university's medical school on the ethics of transplants and also counseled transplant patients.

> "STUDENTS BENEFIT IMMENSELY WHEN FACULTY NO LONGER CONCEIVE OF THEMSELVES AS GUIDING THE NEXT GENERATION OF TEACHER-SCHOLARS."

These Woodrow Wilson programs provide more than a hundred such examples, surprising but convincing in their application of academic knowledge, and the reports of the students are strikingly in agreement. To a person, they note a new appreciation of the power of their discipline, a sense of how much they might accomplish in various venues, and an improvement in the writing of the dissertation because of the experience. It is not that all of them will now opt for non-academic employment, but they have learned something about the power of their expertise in the world at large. And that is what the Responsive Ph.D. most centrally concerns.

NEW PRACTICES

Certificate in College and University Faculty Preparation

Howard University

Through a certificate program, Howard exposes doctoral students to the full range of the roles and responsibilities of faculty life and major issues in higher education. It provides an official credential based on credit-bearing courses, as well as practicum and field experiences, that encompass teaching and learning as a scholarly activity; mentoring; assessment of learning outcomes; ways to achieve and maintain diversity; technology in higher education; and citizenship in the academic community.

Future Faculty Teaching Fellowship Program

Indiana University

This intercampus teaching program prepares up to 20 advanced doctoral students at the main campus of a large university system for faculty careers by providing in-depth experiences of faculty life in other academic environments. Each fellow relocates to another host institution for at least one semester and as much as one year. Fellows teach (with full responsibility) two courses a semester at the host campus or college and participate in faculty service activities. The host department assigns each fellow a faculty mentor.

Entering the Professoriate

Princeton University

Through a four-week mini-course offered during the spring term, Princeton provides additional professional preparation for advanced doctoral students who are assuming their first post-graduate academic appointments the following academic year. Housed in the university's center for teaching and learning, the course addresses expectations for professional advancement; presents aspects of promotion and tenure; examines the necessary balance between professional activities; explores how students learn; provides a profile of today's undergraduate student; and offers suggestions on preparing and delivering courses.

Huckabay Fellowship Program: Preparing Future Faculty

The University of Washington

Huckabay Fellows identify specific teaching and learning projects and then seek a faculty member—either from the university or from another nearby community college, four-year college, or university—to serve as a teaching mentor and project collaborator. Each year, nine student-faculty teams receive the fellowship for one academic quarter. Participants typically design an undergraduate course in their discipline that they may later teach, or explore new avenues of instruction (such as an application of instructional technology, online teaching, or pedagogical uses of various media).

Humanities Out There (H.O.T.)

The University of California at Irvine

H.O.T. aims to create innovative K–12 curricula, responsive to state standards, that increase basic literacy, develop disciplinary competency in English language arts and history/social sciences, and encourage reading and writing across the humanities curriculum, primarily targeting English language learners. Graduate students work closely with K–12 teachers and faculty to achieve a deeper understanding of both the relevant disciplinary research and K–12 classroom practice. They then develop new K–12 applications, learning at the same time to apply social science research methods.

NEW PEOPLE

Thus far, this report has addressed the *what* of doctoral education and neglected the *who*. *New People* is concerned with effectively drawing in and preserving diversity in the doctorate. Defenders of doctoral education often cite as evidence of success the large number of students who leave their homelands to earn a doctorate in the United States. While this is a worthy point, it implies an embarrassing counterpoint, one exposed anew in the aftermath of the September 11 attacks. As the federal government narrows immigration opportunities, universities worry that their research labs will go understaffed. Such a worry need not occur, of course, if we were as effective in educating our own population as we are in attracting international students. The number of African-American, Hispanic, and Native-American Ph.D.s remains terribly low despite a tremendous number of worthy efforts by nonprofits and government agencies. Women have made more progress, but numbers are distressing in some disciplines there as well. At present, diversity in doctoral education lags far behind the achievements of business, government, and professional schools.

The Responsive Ph.D. has focused on four approaches for democratizing doctoral education. A first is to foster a consortium of leaders who are committed to improving diversity in graduate education, as is recommended in *Diversity and the Ph.D.*, the companion study to this report. As previously noted, just the public release of that statement of need for more coordination, more communication, and more data has spurred helpful and healthy conversations among funders and organizations interested in shared efforts. A second approach involves presenting doctoral education more aggressively in the earlier stages of education. If up to 70 percent of Latino students who attend college begin in community college (and often do not go on to four-year universities), then that is where the graduate school must make a connection. And well before then, in middle school, students make course decisions that determine their college eligibility. The graduate school, in other words, will not succeed by focusing alone on undergraduates but must participate with earlier stages of education to enlarge the eligible cohort. This kind of outreach in no way precludes the current efforts such as those associated with McNair and with National Science Foundation programs such as the Alliances for Minority Participation (AMP) and Alliances for Graduate Education and the Professoriate (AGEP), efforts to make the most of that undergraduate cohort by providing bachelor's students with early research opportunities and graduate students with the support that will encourage their success. But it does mean going to places where we haven't been.

> "THE GRADUATE SCHOOL WILL NOT SUCCEED BY FOCUSING ALONE ON UNDERGRADUATES."

Third, graduate schools must concentrate more on mentoring and professional support. Those students of color who do get to graduate school, according to an American Council on Education report, "do not feel mentored and they do not feel supported in the way that white students are. …This sense of isolation and lack of support was nearly universal among the minority graduate students with whom we met" (Fine Knowles & Harleston, 1997, p. 6). Yet even white students voice a similar complaint: "An overwhelming number of students reported that…mentoring needs to begin earlier, be more systematic, be based on a multiple-mentor model and formally include teaching and curriculum concerns and career planning" (Nyquist & Woodford, 2000, p. 20).

NEW PEOPLE

Summer Multicultural Access to Research Training (SMART)

University of Colorado at Boulder

SMART, a ten-week, faculty-mentored research experience for talented undergraduates (interns) interested in pursuing graduate education, aims to increase the diversity of doctoral graduates and future faculty members. Intensive research training and a workshop series prepare students for graduate school and for the professoriate. At an annual year-end symposium, interns present results of their research to faculty, staff, and students on the university campus. The program is a component of NSF's Alliance for Graduate Education and the Professoriate (AGEP).

Students of Color of Rackham (SCOR) Conference

University of Michigan

SCOR's annual conference—the largest student-run national conference for graduate and professional students from populations historically underrepresented in higher education—includes presentations of scholarly research, workshops on academic life, and seminars on issues that affect communities of color. The three-day interdisciplinary event includes workshops and roundtables, paper and poster presentations, speakers, networking opportunities, and paper and presentation competitions reviewed by 30 university faculty adjudicators.

The Office of Diversity and Equal Opportunity (ODEO) Fellows Program

Yale University

ODEO provides minority graduate students with peer mentoring and focused programming. Fellows are doctoral students themselves who both develop programming and serve as peer advisors and advocates, helping minority doctoral students access resources and programs that focus on their specific needs and assisting undergraduate students interested in graduate school. Nine fellows are chosen each year by a selection committee to plan, implement, and evaluate recruitment and retention programs for students from underrepresented groups, and for minority students in general.

Conference on Graduate Education

Washington University in St. Louis

A partnership between the Chancellor of Washington University and Target Hope, a nonprofit Chicago-area program, the conference introduces the option of graduate school to undergraduates from underrepresented racial and ethnic groups, with the goal of encouraging them to pursue a graduate or professional degree. The three-day conference includes an overview of graduate school funding, a panel discussion by graduate and professional students, lectures from faculty on the benefits of graduate school and how best to prepare, and presentations by Chancellor's Graduate Fellows.

Various Responsive Ph.D. institutions have developed programs that use mentoring, networking, and professional enrichment to nurture students of color. *(See sidebar, next page.)* Yet finally, it may be that all of the other concerns of the Responsive Ph.D. can make themselves good in terms of this vital challenge to diversify the American intellect. Is it possible that so few students of color undertake the doctorate because, however undeliberately, the doctorate has imaged itself as abstract, detached from real social

concerns? There has been no deep questioning of how the background of practitioners affects the content and method of academic disciplines. In fact, according to a report prepared for the Compact for Faculty Diversity, students of color "are more interested than their white counterparts in collaborating in interdisciplinary research" (Golde, 2001, p. 10), and a greater percentage of doctoral students of color look to non-academic careers (Golde & Dore, 2001). One of the healthier aspects of the national life, fully evident in academia, is the desire of people from oppressed groups to give back, to stay connected to their communities and make their individual success helpful for others in that population. A responsive Ph.D. affords the doctorate a reasoned urgency, and it encourages those kinds of connectivity for all students.

OUTCOMES

The Responsive Ph.D. roundtables yielded some compelling, concrete results, and several institutions implemented their ideas to excellent effect:

- Out of **Yale University's** roundtable process came a pilot program for an alumni networking database that will put students, faculty, and alumni into direct contact. The intent: to help scholars refine research ideas, give students new career connections, and engage alumni more directly in department life, encouraging them to illustrate how they apply their own doctoral expertise in the disciplines to their work beyond academe. The pilot, a collaboration among the graduate school, alumni association, and graduate career center, began in fall 2002.

- In conjunction with a project supported by the Carnegie Foundation's Scholarship of Teaching and Learning (STL) program, **Howard University** focused its roundtables on strengthening pedagogical scholarship, especially in relation to teaching diverse populations. In fall 2002, Howard's graduate school created its first Research on Scholarship of Teaching and Learning Awards. The program encourages dynamic collaborations between student-faculty teams who research novel pedagogical approaches, and then test them in undergraduate courses. An annual public forum will showcase awardees' work.

- Transparency of information emerged as a top concern in doctoral education at Duke University, the **University of Texas at Austin**, and **Washington University in St. Louis**. The graduate schools are proposing new guidelines for departments to make information on a range of matters—academic and nonacademic placements, disciplinary or cultural expectations, time to degree, and the like—more publicly available to new and prospective Ph.D. students. In some cases, information requirements are tied to annual budget approvals. (See sidebar, next page.)

- Through its roundtables, **Washington University** developed a dynamic plan to engage doctoral students in the national debate on emerging trends in doctoral education. In October 2003, as part of its Sesquicentennial Celebration, the university hosted a national conference of graduate student leaders to focus on the future of graduate education. Students engaged with many of the Responsive Ph.D. themes. Enthusiasm was so high that a second conference, once again to be convened by the Responsive Ph.D. initiative and co-sponsored by Woodrow Wilson and Washington University, was slated for November 2005.

CONNECTING RESOURCES TO OUTCOMES

Graduate Department Budgeting Allocation

Duke University

Duke provides arts and sciences departments with incentives to strengthen their graduate programs, rather than use enrollments to satisfy their service needs. The graduate dean allocates departments' budgets for support of doctoral students based on evidence of a) increasing the number of faculty; b) attracting more Ph.D. applicants; c) improving student quality; and d) obtaining external funds to support their students. As a result of this process, all incoming Ph.D. students receive a standard support package that guarantees at least five years of funding.

Online Graduate Student Demographics

Duke University

This Web-based initiative, part of a broader university examination of graduate education, provides a complete statistical profile of a number of characteristics of all Ph.D. programs and students at the university. The information gathered is used to educate prospective and current students about the challenges and realities of graduate education, and to educate faculty about student performance and expectations within each department.

Graduate Research Internship (RI)

University of Texas at Austin

The (RI) gives control over fellowship awards to individual faculty members who use them to recruit outstanding graduate students to their departments. Each fall, faculty members compete for one of 30 RI awards; each faculty award winner identifies potential internship candidates among new graduate applicants, then attempts to recruit these students with the offer of the RI position. The faculty member mentors the RI during the student's first year, introducing him or her to methods, problems, and professional development opportunities in the discipline.

Graduate Funding Initiative

Washington University in St. Louis

Matching newly admitted Ph.D. candidates to available university resources, the Graduate Funding Initiative ensures every student in good academic standing at least six years of support. Fellowship and TA funds unexpended at the end of each academic year support summer stipends for graduate students. Faculty are strongly committed to this approach, recognizing that new student admission is linked to currently enrolled students' completion of the doctorate. A key factor: Primary authority for allocating resources is vested in the central graduate school office.

As significant as these outcomes on individual campuses are, equally important are the institutions' desires to learn from each other's work. Several institutions have expressed interest in adapting the University of Texas' Intellectual Entrepreneurship Program. Others are proposing mentoring guidelines similar to the University of Michigan's well-known faculty and student mentoring handbooks. And Yale's new alumni networking project is an obvious test case for other institutions looking to engage their Ph.D. alumni more effectively. Through careful study of these and other demonstration projects at the Responsive Ph.D. partner institutions, a new vision of doctoral education is emerging, in more than just words, but in concrete practices illustrating the dynamic holism of a more robust doctorate.

RECOMMENDATIONS

A thorough assessment of many of the efforts that grew out of these initial Responsive Ph.D. roundtables will require a test of time. Even *in medias res*, however, exemplars at the participating universities and others point toward several basic recommendations:

- The central notion of a graduate school requires strengthening so that it can become a vital force in breaking down barriers between programs and sponsoring a more cosmopolitan intellectual experience for doctoral students.
- Changes in doctoral policy, as well as in the ultimate standards for the doctorate in each field, should emerge from a continuous dialogue among the faculty who teach doctoral students, the students themselves, and the representatives of diverse sectors that employ doctoral graduates.
- Departments and graduate schools need to involve Ph.D. alumni more substantively in doctoral training.
- Doctoral students need both departmental and extra-departmental structures to give their concerns a strong and effective voice and to cultivate graduate student leadership as a component of graduate education and professional development.
- Information about doctoral education, program expectations, and career prospects must be more transparent to students from the moment they begin to consider a Ph.D.
- Doctoral programs urgently need to expand their approaches to mentoring, such as through team mentoring, particularly for attracting and retaining a diverse cohort of students.

CONCLUSION

As was clear at the beginning of the Responsive Ph.D. effort, concerned parties have already produced hundreds of pages of recommendations on doctoral education, yet there has not been a lot of lived change. To help address this issue, the Woodrow Wilson Foundation included in the Responsive Ph.D. an assessment component, asking the partner institutions how best to gauge the effectiveness of their new practices and best practices in doctoral education. Summaries of the results of these inquiries appear in an appendix to this report, with a case study for each practice reviewed that details not only its origins, process, and resources, but also the various ways in which each has examined its own achievements.

Through ongoing re-assessments and redirections, the Responsive Ph.D. hopes to challenge itself with a certain degree of impatience. In the last few years, a number of national foundations have decided to delete higher education as a category for funding. While funders claim any number of reasons for these decisions, it is hard not to worry that perceived inaction is among them. "We spend millions on universities and we just don't see the change," a foundation officer told me. "When we spend the same amount on any other issue—world hunger, population control, disease—we see a great deal more result."

Of course, this is not entirely fair. Universities indeed change very slowly, but they also change profoundly. (Schools come up with a new panacea every few weeks and really don't change very much at all.) Even so, a critical habit of mind can create the unintended result of extreme stodginess.

One thinks, for instance, of all those furious departmental debates over the canon in literary studies. The net result introduced many new female authors and writers of color, to good effect. But the number of African Americans who earn doctorates in English has not improved over this period very much at all, for faculty failed to connect to community organizations or the schools. In short, hermetic revolutions don't cut it.

The Responsive Ph.D. is meant to mark a more effective turning point—a moment at which not just its participants but universities nationwide can look closely at doctoral innovations, try them out, tailor them, spread them. Hence the toolkit offered by the detailed case studies that accompany these pages. The work of this initiative has been to sum up, compile, and return to doctoral institutions their own best wisdom, and their own best potentials. Its future lies in making these potentials real, and thereby truly enacting, for higher education and the society as a whole, the immense promise of a truly responsive Ph.D.

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APPENDIX

ASSESSING BEST PRACTICES:

CASE STUDIES FROM 14 RESPONSIVE PH.D. UNIVERSITIES

In the first five years of the Responsive Ph.D. initiative, the 14 founding Responsive Ph.D. universities offered examples of their most innovative and effective doctoral practices—in many cases, using the platform of the Responsive Ph.D. to implement, expand, and exchange their ideas. This appendix offers summaries of case studies developed for each of these practices. Fuller discussions of these innovative practices, including descriptions of the ways in which each institution assesses their effectiveness, are available on CD from the Foundation (see www.woodrow.org/responsivephd for more information).

FORMING NEW PARTNERSHIPS

- Career Goal Setting Workshop Series
  Arizona State University
- Graduate Dean's Advisory Council
  Arizona State University
- Career Conversations
  Princeton University
- Departmental Industrial Recruiting Program
  The University of California at Irvine
- Ph.D. Career Seminar Series
  The University of California at Irvine
- Center for the Humanities and Arts Internship Program
  The University of Colorado at Boulder
- Entrepreneurship Course
  The University of Texas at Austin
- Connecting the Community: Institute on the Public Humanities
  The University of Washington
- The K-Through-Infinity Professional Development Systemic Initiative
  The University of Wisconsin at Madison

CRAFTING NEW PARADIGMS

- President's Summer Undergraduate Research Initiative
  Indiana University
- Exhibit and Exchange Student Lecture Series
  The University of Pennsylvania
- Navigating the Dissertation
  The University of Pennsylvania
- Summer Web Workshop Series
  Washington University in St. Louis

EXPLORING NEW PRACTICES

- Faculty Award for Outstanding Doctoral Mentor
  Arizona State University
- Disciplinary Teaching Certificate
  Duke University
- Certificate in College and University Faculty Preparation
  Howard University
- New Student Orientation Program
  Howard University

EXPLORING NEW PRACTICES *(continued)*

- Research in Teaching and Learning Awards
  Howard University
- Future Faculty Teaching Fellowship Program
  Indiana University
- Scholarship of Teaching and Learning Program
  Indiana University
- Entering the Professoriate
  Princeton University
- Humanities Out There
  The University of California at Irvine
- Lead Graduate Teacher Network
  The University of Colorado at Boulder
- Seminar on College Teaching: Preparing Future Faculty
  The University of Michigan
- Faculty Conversations on the Academic Job Search and Academic Life
  The University of Pennsylvania
- International Teaching Assistant Assessment
  The University of Texas at Austin
- Huckabay Fellowship Program: Preparing Future Faculty
  The University of Washington
- Guide to Graduate Student Life
  The University of Wisconsin at Madison
- FEAST Student-Faculty Lunch Program
  Yale University
- McDougal Graduate Student Center Fellows
  Yale University

RECRUITING AND RETAINING NEW PEOPLE

- Summer Multicultural Access to Research Training (SMART)
  The University of Colorado at Boulder
- Students of Color of Rackham Conference
  The University of Michigan
- Summer Institute for New Merit Fellows
  The University of Michigan
- Student and Faculty Advisory Boards for Graduate Opportunity Minority Achievement Program
  The University of Washington
- Partners for Success
  The University of Wisconsin at Madison
- Conference on Graduate Education
  Washington University in St. Louis
- Office of Diversity and Equal Opportunity Fellows Program
  Yale University

CONNECTING RESOURCES TO OUTCOMES

- Graduate Department Budgeting Allocation
  Duke University
- Online Graduate Student Demographics
  Duke University
- Graduate Research Internship Program
  The University of Texas at Austin
- Graduate Funding Initiative
  Washington University in St. Louis

KEY TO ABBREVIATIONS

At the beginning of each case study, symbols summarize some basic information:

BUDGET

- Less than $500 . . . . . **$**
- $500 to $2,000 . . . . . **$$**
- $2,001 to $5,000 . . . . . **$$$**
- $5,001 to $10,000 . . . . . **$$$$**
- Over $10,000 . . . . . **$$$$$**

STAFFING

- Faculty/professional staff . . . . .
- Clerical/support staff . . . . . [ ]
- Graduate student staff . . . . . < > or graduate assistant

Note: A gray figure . . . . .
indicates that that person's time is devoted only in part to the project for its duration.

Career Goal Setting Workshop Series: Preparing Future Professionals

Arizona State University
http://www.asu.edu/graduate/pfp

DATE ESTABLISHED: 1999 **BUDGET: $** **STAFFING: <>**

WHY IS THIS A BEST PRACTICE?

- focus on career development and planning, not just job placement
- use of multidimensional career assessment instruments, not just targeted to job interests
- use of a cohort strategy to promote continued networking among doctoral participants

The Career Goal Setting Workshops—one component of the Preparing Future Professionals Program—help doctoral students explore and plan viable career paths beyond the academy. The three-part series attracts primarily third- and fourth-year doctoral students. Two targeted versions are offered: one for humanities and social sciences students, one for physical/life sciences and engineering students. Limited to 10 participants per workshop, the small sessions allow instructors to foster cohort learning and tailor assistance to individual students' needs. Through interactive and field-based assignments, students

- assess their values, interests, and work styles;
- experiment with strategies to identify desirable professional fields, networking contacts, and job opportunities; and
- appraise networking outcomes and develop a career action plan.

Early in the program, participants complete a career assessment, obtained from World of Work, Inc. (WOWI). Based on the results, they identify and research three to four possible career paths and develop appropriate methods for pursuing them. Participants then conduct informational interviews, creating their own "personal advisory boards" with diverse expertise and backgrounds and cultivating an active network of contacts.

Two Psychology Department faculty members organize and lead the workshop. They guide students through the steps of developing professional networks and designing personal career action plans. As a result of student feedback, the workshops—originally offered as one-session events—became the current three-part series, offering a more developmental, cohort-sensitive approach to graduate student learning.

WHAT MAKES THIS PROGRAM EFFECTIVE?

Program: Use of cohort groups to create a collaborative learning community in which students can network long after any given workshop; generous volunteering of expertise by faculty; insightful and open feedback from students, resulting in many improvements to the series.

Participants: Students' courage to disclose their interests in exploring careers beyond academia and their willingness to deal with the risk of such disclosure.

Graduate Dean's Advisory Council

Arizona State University

DATE ESTABLISHED: 1989 **BUDGET: $** **STAFFING: +[ ]**

The Graduate Dean's Advisory Council, founded by the Dean of the Graduate College and a prominent community member and university donor, serves as both an outreach group for the community and an advisory group to the dean and senior staff of the Graduate College. Diverse in their areas of expertise, interest, and knowledge, the eighteen members of the council work on national issues and trends in both graduate education and at the university.

WHY IS THIS A BEST PRACTICE?

- engagement of influential community members in doctoral-level issues, and utilization of leaders to educate the broader community about them
- provision of important communication network between university and community
- potential to facilitate development activities

Members of the council are selected from a pool of prospects recommended by the current council and the dean. After completing an orientation, the council meets four times a year. Top doctoral fellowship recipients and student government members are invited to two of the council meetings.

The council is intended to be advisory in nature and is not associated with previous donations. Each council member acts as a university ambassador and assists with a variety of fund-raising initiatives, working actively on one of three loosely structured work groups:

- The *public support* work group increases public sector funding of graduate education by lobbying and proposing legislation to strengthen graduate education in the state.
- The *employability* work group increases understanding and support of graduate education among corporate, public, and nonprofit employers by establishing internships for graduate students, demonstrating the value of employing Ph.D.s, and collaborating with employers and community leaders to design new forms of graduate professional preparation.
- The *fellowship development* work group increases private sector funding of graduate students by developing fund-raising strategies among individual donors, corporations, and foundations.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Clear articulation of the mission and high expectations of the group; selectivity of council membership.

Participants: Enthusiasm of council members; commitment to attending meetings and level of preparation for meetings.

Career Conversations

Princeton University
http://web.princeton.edu/sites/career/Grad/Start/workshops.html

DATE ESTABLISHED: 1990 **BUDGET: $$** **STAFFING:**

Career Conversations provides doctoral students with an opportunity to meet graduate alumni and other professionals working outside academe. In panel workshops, speakers discuss career path and career exploration issues, highlighting how their backgrounds and skills have proved transferable to careers outside of research and teaching in the academy. Career areas represented include business, entrepreneurship, government, nonprofit organizations including NGOs, and academic administration.

WHY IS THIS A BEST PRACTICE?

- interaction with former graduate students now in careers outside the academy
- attention to specific skills gained in doctoral programs and transferability of those skills to a variety of non-academic environments

The workshops, held throughout the academic year, average 90 minutes in length. Some topics are fairly broad (e.g., careers in e-learning), while others are more narrowly focused to a particular organization (e.g., careers with Bell Labs) or type of position (e.g., careers in consulting). Four panelists, at most, participate. Prior to the program, each panelist receives a set of similar questions and issues to review; he or she addresses these issues during the panel discussion, and a structured question-and-answer session with the audience follows. Each panel session ends with an informal networking opportunity for students, complete with refreshments. Prospective panelists are identified through the career center's employment network system and through databases affiliated with Career Services and the Alumni Council.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Institutional support for exploring careers outside of academia, which exists from the president's office down; institutional goal of service and "giving back," which has contributed to an extremely responsive and receptive graduate alumni group participating as panelists in the program.

Participants: Student participants' willingness to consider and learn more about career options outside of the academy.

Departmental Industrial Recruiting Program

The University of California at Irvine

DATE ESTABLISHED: 1985 **BUDGET: $** **STAFFING:**

WHY IS THIS A BEST PRACTICE?

- job search process under the direction and authority of an academic department, rather than a campus-wide administrative department or unit
- direct involvement of faculty in the professional development of students and in collaboration with outside employing organizations

The Departmental Industrial Recruiting Program in the Chemistry Department provides master's and doctoral graduates, as well as postdoctoral fellows, with the opportunity to interview with non-academic companies for postgraduate employment in chemistry-related fields. Industrial companies collaborate with chemistry faculty and are encouraged to support the graduate program by donating graduate fellowships, funding for equipment, or support for symposium programs. Alumni promote the chemistry graduate program by encouraging their industrial employers to recruit students at the university through the Industrial Recruiting Program.

The program began as a component of a campus-wide recruiting program administered centrally through the Career Center. To meet more fully the needs of the students and recruiting organizations, the Chemistry Department took on direct responsibility for the program. Typically, an interested company initiates contact with the Chemistry Department to schedule an on-campus recruiting visit. The department takes the lead after the initial call, following up to confirm reservations and make necessary arrangements. An informational meeting is held with interested students prior to the start of the program. Faculty who have students participating in the interview process host lunch and/or dinner for the company representative, providing an opportunity for conversation about each student's work and qualifications, as well as a chance to discuss scientific topics from their respective fields of interest.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Intradepartmental administration of the program (eliminates unnecessary bureaucracy, provides flexibility); graduate students' ability to focus less on the job search and more on the thesis or dissertation; motivation for students as they observe more senior students successfully obtaining jobs through the program.

Participants: Faculty commitment to educating, training, and developing productive, professional scientists; companies' recognition of students' high quality.

Ph.D. Career Seminar Series

The University of California at Irvine
http://www.career.uci.edu/Graduate/graduate_phdjobsearch.aspx

DATE ESTABLISHED: 2001 **BUDGET: $$$** **STAFFING: [ ] + < >**

During the Ph.D. Career Seminar Series—an annual one-day job search event—professional staff, faculty, current doctoral students, and alumni present interactive seminars, workshops, and panel discussions to support the career and professional development of doctoral students. Students also participate in a networking lunch and a tour of the Career Center facilities. In addition to the annual event, quarterly workshops are offered to provide more extensive skill-building on individual topics.

WHY IS THIS A BEST PRACTICE?

- unique cross-division collaboration between the Career Center in Student Affairs and the Instructional Resource Center in the Division of Undergraduate Education
- utilization of combined-unit expertise in career development and academic job market issues
- opportunity to practice skills learned

The Ph.D. Career Seminar Series event is usually conducted on a Friday, when students generally have fewer classes. Workshop topics can include creating a vita, converting a vita to a resumé, developing a teaching portfolio, preparing for the academic job search, learning about the interviewing process, and practicing interview skills. Panel discussion topics include preparing for the academic interview, negotiating salary, women's issues in higher education, and careers outside academia. Some doctoral student workshop presenters are drawn from the TA Consultant Program in the Instructional Resources Center (IRC), which provides experience in workshop design and delivery and information on academic job preparation to program participants. This program is part of the recently launched Graduate Student Career Services, begun in 2001, and it combines the formerly independent efforts offered by IRC and the Career Center.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Use of panelists at lunch for networking purposes; program location's close proximity to campus; interactive nature of event and workshops; pre-registration requirement; collaboration and synergy created between two administrative units; multiple avenues and constituents used in marketing strategies; ability to pull from a select pool of qualified TA consultants should key staff/coordinators leave the program.

Participants: Interest of students based on job market concerns and "immediate need" for addressing those concerns; openmindedness of students with readiness to hear and learn; willingness to participate; diverse attendees based on demographics and disciplines.

Center for the Humanities and Arts Internship Program

The University of Colorado at Boulder
http://www.colorado.edu/ArtsSciences/CHA/intern.html

DATE ESTABLISHED: 1999 **BUDGET: $** **STAFFING: [ ]**

The Humanities Internship Program places humanities graduate students into internships outside the academy, where they can explore the transfer of academic knowledge and skills to new settings. The internships inform employers—corporate, government, and nonprofit partners—of the value of an advanced degree in the humanities. Internship positions must offer professional opportunities and a competitive wage. The program tends to attract students nearing the dissertation stage.

WHY IS THIS A BEST PRACTICE?

- student collaboration with faculty mentor
- competitive pay and intellectually challenging task requirements
- relationship-building between center and external employers
- graduate students as humanities ambassadors

Partnering institutions are identified by the Career Services Center and the External Advisory Council (made up of the university's corporate and community partners). To qualify, an internship must consist of an intellectually challenging job and tasks worthy of an advanced doctoral student, and must pay a reasonable rate (equivalent to an assistant professor's salary).

Interested students formally apply at the beginning of each semester with a resumé and letter of interest. In addition, each candidate chooses a faculty mentor who signs off on the application and, for the duration of the internship, serves as a resource and campus contact, providing the student with guidance for integrating the experience into his or her academic program. Coordinators interview candidates and forward the applications of the most qualified to individual employers, who then interview and hire each intern. The program provides resumé and interview preparation assistance, and the coordinator and a member of the center's faculty steering committee interview each student applicant.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Enthusiasm, commitment, and extensive contacts of the chair of the External Advisory Committee; commitment among a small group of faculty; strong institutional support for graduate students' professional development, especially for careers outside the academy.

Participants: Students' eagerness to learn about employment options and become more competitive; students' appreciation of the institution's commitment to this program; employers' reputation as innovators and commitment to maintaining internship opportunities in a difficult economic climate.

Entrepreneurship Course

The University of Texas at Austin
http://www.utexas.edu/ogs/development.html

DATE ESTABLISHED: SUMMER 2001 **BUDGET: $** **STAFFING:**

WHY IS THIS A BEST PRACTICE?

- using concepts of entrepreneurship to address both academic and non-academic innovation
- tangible knowledge transfer between the academy and society
- integration of scholarship to have a meaningful impact on communities important to students

The Entrepreneurship Course is a five-week, credit-bearing course offered each summer for master's and doctoral students across all disciplines. Designed to serve as a catalyst for innovation, the course helps students envision creative ways to apply their intellectual training and expertise to scholarship, the community, the corporate world, or other arenas. During the course, students focus on developing their vision into a viable venture using marketing research, teamwork and collaboration, venture/business planning, and presentations.

During the course, which meets three afternoons a week, students have two core assignments: 1) conduct background research on the venture idea and the needs of the marketplace, and perform research interviews with potential clients, and 2) develop a venture plan and present a persuasive final presentation to the class. Team-taught by a faculty member and a member of the on-campus venture for business and technology incubation, the course's collaborative structure makes the 20–25 students accountable to their instructors and classmates for enough time to create a viable project. Students attracted to learning about entrepreneurship come from a full range of disciplines, from the arts and sciences to business and engineering.

With the oversight of the current faculty instructor, the Entrepreneurship Course started under the auspices of the Intellectual Entrepreneurship program. The course has since been modified under the Graduate School's Professional Development and Community Engagement program.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Students' ownership of their projects and sense of accountability to venture partners and other course participants; emphasis on creating a pragmatic, tangible venture that responds to a verifiable need; realistic, hands-on activities, especially interactions with venture partners; ethos of the instructors, whose own professional choices embody the course's spirit.

Participants: Highly motivated students who self-select for opportunities to apply scholarship and discovery in new ways; diversity of students' ethnic and disciplinary backgrounds and community experience.

Connecting the Community: Institute on the Public Humanities

The University of Washington
http://depts.washington.edu/uwch/research_graduate_Connecting.htm

DATE ESTABLISHED: 2003 **BUDGET: $$$$$** **STAFFING: + [ ]**

The Institute on the Public Humanities for Doctoral Students addresses both the need for connection between the campus and the community and the call for expanded career possibilities and training for graduate students. Aimed at students going into higher education, the Institute encourages participants to develop a "fourth portfolio" on connecting with the community and public scholarship. Although the Institute provides students with examples of how their skills can be employed outside the academy, it is not specifically designed to introduce students to alternative careers. Instead, it promotes structural change in graduate education by suggesting that a portfolio in the public humanities will become part of a well-rounded career inside or outside academia.

WHY IS THIS A BEST PRACTICE?

- leverages and expands on already-established programs
- provides framework to promote resources specific to local institution, while integrating into larger higher education issues
- designed specifically for doctoral students

The weeklong institute is limited to 25 doctoral students, competitively selected from across the humanities. Before meeting, participants receive a reader that introduces them to scholarship on cultural democracy and theories of public work. The Institute presents models of campus/community partnerships in the humanities and models of public scholarship drawn from the university and from international institutions, inviting the architects of these programs to act as resources and speakers. Formal presentations, workshops, and site visits focus on different kinds of cultural and educational settings (e.g., museums, zoos, bookstores, K–12 schools, and community colleges). During the institute, students work together in small teams to imagine ways in which their research might connect with a larger public, and to design a project in the public humanities.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: The Simpson Center's efforts to build campus/community partnerships and interdisciplinary dialogues; focus on developing public humanities projects and interactive context of readings, discussions, and site visits.

Participants: Diversity of disciplines and research interests represented by UW students and faculty; national leaders, local faculty, and community leaders presenting varied and inspirational models and examples of public humanities initiatives.

K-Through-Infinity Professional Development Systemic Initiative

The University of Wisconsin at Madison
http://www.wisc.edu/gspd/kti

DATE ESTABLISHED: 1999 **BUDGET: $** **STAFFING: 2 + <>**

The K-Through-Infinity Professional Development Systemic Initiative (KTI) provides a fellowship and training opportunity for doctoral students in STEM disciplines (Science, Technology, Engineering, and Mathematics) to work in K–12 schools while enriching their own graduate education. It was established nationally in response to the National Science Foundation's "Graduate Teaching Fellows in K–12 Education" (GK–12) initiative.

WHY IS THIS A BEST PRACTICE?

- focus on improvement of teaching in STEM disciplines
- involvement of graduate students in K-12 educational settings
- use of centralized administrative unit to conduct assessment

Teams composed of fellows, teachers, school district administrators, and university researchers work on curricular and pedagogical initiatives for one to three years. Cohorts of fellows are appointed for 15 months, allowing new and experienced fellows to overlap on teams for three months over the summer. Experienced fellows mentor incoming fellows by coordinating orientation and assisting with the facilitation of teacher professional development workshops. New fellows attend orientation and observe teacher professional development workshops and pre-college enrichment programs. All fellows regularly spend time in classrooms working with students and participate frequently in meetings with school district liaisons, in-service events in schools, and professional development seminars arranged by the school district and university.

Program contours and implementation strategies have evolved and changed significantly in response to the expressed needs of the program's multiple stakeholders. While the program built upon the university's numerous outreach connections to K–12 education locally, regionally, and nationally, over time it focused exclusively on the local school district. As KTI's activities become increasingly aligned with the local school district's emerging strategic priorities and goals in the context of standards-based systemic reform, the role of the fellows in K–12 institutions continues to shift over time.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: The underlying operating strategy of a team-directed, experimental approach to projects, guided by assessment and formative evaluation; external support.

Participants: K–12 educators and university faculty committed to effecting a new kind of training for graduate students; faculty advisors who endorse or encourage participation by their students, graduate students ready to engage in multidisciplinary learning.

CRAFTING NEW PARADIGMS

President's Summer Undergraduate Research Initiative

Indiana University
http://www.indiana.edu/~grdschl/psuri.html

DATE ESTABLISHED: 1996 **BUDGET: $$$$$** **STAFFING: [ ]**

The President's Summer Undergraduate Research Initiative extends additional research opportunities to both graduate and undergraduate students through an eight-week summer research program. The program encourages doctoral graduate students to expand their teaching and mentoring experiences by leading small research teams while providing undergraduates with the opportunity to pursue directed research within small groups.

WHY IS THIS A BEST PRACTICE?

- focus on mentoring in research
- direct research engagement of graduate students with undergraduates
- team approach to conducting research
- leadership role of graduate students

Each spring, interested doctoral students submit research proposals that identify a specific research topic and select up to five upper-level undergraduate students to serve as team members. Each year, between nine and 14 proposals are selected for participation in the initiative. Selection is based on the clarity of the proposal, the significance and feasibility of the research project, the ability of the students involved to complete the project successfully during the summer, the formulation of team members' individual responsibilities, and the opportunities for interaction between the graduate mentor and the undergraduate team members as research partners.

The graduate student team leaders convene their research teams at least once a week and offer additional individual consultation opportunities throughout the week. At the end of the program, each team is responsible for submitting a final report on the research outcomes and presenting their research at a professional, campus, or departmental meeting. Each team member receives a stipend and an allowance for research expenses. The review panel for proposals consists of one graduate student, one faculty member, and one associate dean.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Interaction between graduate students and undergraduate students; opportunity to work in small groups on a large campus; opportunity for graduate students to independently choose a research topic (i.e., take ownership).

Participants: Graduate student interest in the project even though the stipend does not provide the same amount of income that another summer job might offer; student persistence in reapplying each year, knowing that only 1/3 of all proposals will be accepted.

Exhibit and Exchange Student Lecture Series

The University of Pennsylvania
http://www.gsc.upenn.edu/programs/lecture/exhibit_exchange.htm

DATE ESTABLISHED: FALL 2002 **BUDGET: $** **STAFFING: + <>**

The Exhibit & Exchange Student Lecture Series (E2) is a series of talks by individual graduate and professional students who—in the setting of a campus-wide Graduate Student Center— present their research to an audience of peers. The series offers students an opportunity to solicit feedback on research, to practice job talks, or to rehearse conference presentations. In the process, they hone presentation skills and begin finding their own academic voices. The series also provides a forum for graduate students to learn about research conducted by their peers in other disciplines.

WHY IS THIS A BEST PRACTICE?

- impetus and leadership from graduate students
- opportunity to practice research and presentation skills
- focus on peer interaction and feedback
- focus on research

The Graduate Student Center's Lecture Fellow, a graduate student assistant, recruits as student presenters individuals conducting interesting research. The Lecture Fellow also invites graduate students who will be attending conferences to first practice their presentations at a lecture in the Graduate Student Center. The series tries to incorporate at least two student presentations each month. Topics within the series are often chosen to tie in with other campus events and issues (e.g., AIDS research during AIDS Awareness month, demography research during Affirmative Action debate week).

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: The title ("Exhibit and Exchange") is less intimidating and more informal than "lecture series," so students feel relaxed about presenting incomplete research; the Graduate Student Center provides a safe place to practice presentation skills; the crossdisciplinary approach broadens audience understanding of approaches and methods across disciplines.

Participants: Students' recognition of their own need for presentation experience and their appreciation for the opportunity to "test it out" on colleagues; awareness of the need to share ideas with colleagues in other disciplines; exposure to contemporary presentation technologies (e.g., PowerPoint, Web-based presentation packages), particularly for students from disciplines where use of this kind of technology is not a presentation norm.

Navigating the Dissertation

The University of Pennsylvania
http://www.gsc.upenn.edu/programs/TA_PhD/nav_dis.html

DATE ESTABLISHED: 2001 **BUDGET: $$$$** **STAFFING: + < >**

"Navigating the Dissertation" is a student-initiated interdisciplinary workshop series—created by students, faculty, and staff in response to students' requests—aimed at supporting motivated doctoral students as they work on their dissertations. Biweekly or weekly workshops address diverse aspects of the dissertation process, from the earliest stages to continuing development and support.

WHY IS THIS A BEST PRACTICE?

- crossdisciplinary approach
- emphasis on peer networking
- structured teaching on timely, practical topics
- topics selected by students

Workshops may cover a wide range of topics, including research methodologies; time management strategies; the dissertation research prospectus; rewrites and peer review; grantwriting; relationships with dissertation advisors and committee members; conference presentations (with visuals) of research; use of reference-importing software; ways to build support networks; and researching while abroad.

Each session is conducted by faculty, staff, and doctoral students across the full range of disciplines, providing participants access to peers as well as expert advisors. The two-hour sessions are offered in late afternoon, with refreshments served so that students can maximize their time (and budgets). Writing-intensive sessions are capped at 30 attendees, to promote small-group interaction, while other sessions are capped at room capacity (about 75 attendees). Students must register online before each session.

Due to the program's success, the Navigating series format has been applied to the teaching assistant training and grantwriting areas of graduate education. Two new series—"Navigating the Classroom" and "Navigating the Grant"—have been embraced by doctoral students who now recognize the concept.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Convenient timing (afternoons); graduate assistant coordinator's high level of responsibility for program and understanding of peer concerns; perspectives on doctoral issues from different units on campus; interdisciplinary interaction; location in the Graduate Student Center (a safe place for graduate students).

Participants: Students' motivation and interest in learning how to complete a dissertation efficiently.

Summer Web Workshop Series

Washington University in St. Louis
http://www.artsci.wustl.edu/~gssw/2004/index.htm

DATE ESTABLISHED: 1995 **BUDGET: $$$$$** **STAFFING: [ ] + 7**

The Summer Web Workshop Series offers doctoral students in the arts and sciences interdisciplinary training in the use of Web-based presentation and instructional technologies—skills that can greatly enhance their professional development and career options, both as future faculty and as professionals.

WHY IS THIS A BEST PRACTICE?

- incorporation of technology with pedagogy
- introductory and advanced development of practical teaching skills
- fellowship component providing peer learning
- career development component involving electronic dimensions to teaching portfolio and CV/resumé creation
- excellent Web site with project findings

Two workshop types are offered in a computer lab setting during the course of the summer: Web Workshop 1, for up to 25 participants; and the Graduate Online Lecture, for up to eight participants. The two workshop series are taught by Liberman Graduate Fellows—recipients of a teaching and technology fellowship—who design the curriculum and instruct graduate students.

The introductory, weeklong Web Workshop 1 series uses Web technology to enhance teaching, to establish online professional identity, and to explore electronic grant searching, distance education, and other opportunities. The second series, the Graduate Online Lecture (GOL), is an advanced, experimental six-week workshop. It introduces advanced public communication and technical skills—particularly those involved in creating online, multimedia Flash presentations—to advanced doctoral students, enabling them to communicate their dissertation research to non-specialists.

A committee that includes the program coordinator and former Liberman Fellows selects up to seven new fellows to teach the workshops each year. New fellows attend training activities that prepare them to teach the workshops.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Interdisciplinary component; graduate students teaching peers; support from graduate dean; collaborative development with other university units; timing (summer months) when graduate students do not have classes; program promotes integration of technology into the classroom.

Participants: Students' high motivation to learn new technologies and develop new skills; peer and collaborative learning; availability and use of a separate computer workshop setting.

Faculty Award for Outstanding Doctoral Mentor

Arizona State University
http://www.asu.edu/graduate/generalinfo/mentor

DATE ESTABLISHED: 1987 **BUDGET: $$$$** **STAFFING:**

The Faculty Award for Outstanding Doctoral Mentor, a highly selective honor, goes annually to a faculty member who demonstrates excellence in and commitment to doctoral student mentoring. The award process begins with open nominations by letter, accompanied by a portfolio; then the nomination and selection committee solicits letters from former doctoral students and unit heads and a statement on mentoring from each nominee.

WHY IS THIS A BEST PRACTICE?

- use of highly selective criteria for award; comprehensive and highly competitive
- use of both quantitative and qualitative measures for assessing excellence in mentoring
- inclusion of faculty and doctoral student perspectives
- draws university-wide attention to doctoral mentoring

To be considered for an award, candidates must present evidence of the following:

- a record of graduate teaching excellence;
- success in chairing doctoral committees, with a reasonable time-to-degree record;
- success mentoring doctoral students and promoting their professional socialization;
- an ability to attract outstanding doctoral students; and
- a record of successful doctoral placements.

The nomination and selection committee consists of former award winners, at-large faculty representatives from across the university, and doctoral students. The committee reviews all nomination materials, creates a short list of qualified applicants, follows up with individuals identified by each applicant in the selection phase, and then makes a recommendation. Recipients receive a monetary award and university recognition at a public reception. In addition, a mentoring booklet, published annually, highlights statements from awardees and excerpts from their colleagues' and students' support letters, promoting excellence in mentoring throughout ASU's graduate community.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Availability of funds from within the Graduate College's ASU Foundation monies; high selectivity criteria; and thoroughness of the review of each candidate.

Participants: Committee members' commitment to graduate students' development and their role in moving those students successfully through graduate school; committee members' continued investment in mentoring current and former students; award winners' natural and energetic mentoring in everyday practice.

Disciplinary Teaching Certificate

Duke University
http://www.biology.duke.edu/teachcert

DATE ESTABLISHED: 1999 **BUDGET: $$$$** **STAFFING:**

The Disciplinary Teaching Certificate prepares full-time doctoral students for teaching positions at institutions ranging from community colleges to research universities. Currently focused on the biological and biomedical sciences, the program is also open to postdoctoral researchers who did not receive teaching guidance during their graduate studies. Students complete work in up to four different areas: pedagogy, teaching, teaching evaluation, and mentoring.

WHY IS THIS A BEST PRACTICE?

- coordination by a regular rank faculty member allowing for continuity from term to term and credibility among faculty
- alignment of program components with students' expressed needs and results of national survey of faculty
- formal recognition of certificate program by the Graduate School

To receive the certificate, students must submit a teaching portfolio including a reflective commentary, a statement of teaching philosophy, samples of curriculum materials and course syllabi, a videotape of teaching, and written evaluations. An executive committee consists of the program director, a faculty member in the department of biology, a faculty member from a partner institution, and two or three graduate students currently enrolled in the pedagogical course. Students who complete the program also receive a notation of the certificate on their academic transcript.

The program also provides suggestions and teaching contacts beyond the departmental assistantship, and resources on evaluation methods. To assist with pedagogical training, a one-credit "Seminar in Teaching Biology" is offered. A steering committee of graduate students and the program director oversees this initiative—the institution's only formally recognized certificate program.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Teaching focus beyond what most graduate departments can offer their students; students' choice of which targeted area(s) will contribute most to their teaching preparation; willing participation of partner faculty; time commitment of an on-site coordinator with a vested interest, who provides structure to the program not typical of a full-time research faculty member; solid match between program components and needs of students.

Participants: Engagement of highly involved students in decision making, especially that of the steering committee; eagerness of students to learn because they feel underprepared for teaching.

Certificate in College and University Faculty Preparation

Howard University
http://www.gs.howard.edu/Special%20program/cprograms/ppf.htm

DATE ESTABLISHED: 2002 **BUDGET: $$$$$** **STAFFING: + <>**

The Certificate in College and University Faculty Preparation provides doctoral students with preparation for faculty careers in higher education. It exposes doctoral students to the roles and responsibilities of faculty life and to major issues in higher education, and provides a credential for faculty preparation analogous to those the Ph.D. degree offers for research.

WHY IS THIS A BEST PRACTICE?

- sequence of academic courses complemented by field experience
- emphasis on development of professional skills necessary for success during the first academic position beyond initial attainment

Designed around courses taught in the university's Preparing Future Faculty program, the certificate program encompasses a practicum or field experience (similar to internships in other professions), a six-hour sequence of academic core courses, and three-hour credits of appropriate electives. The core courses focus on faculty roles and responsibilities in higher education, with emphasis on teaching and learning as scholarly activities. Participants also explore topics including mentoring, learning outcomes assessment, diversity, technology in higher education, and citizenship in the academic community. Electives focus on teaching in the online environment, ethics in teaching and research, and discipline-specific issues of undergraduate teaching and learning. In the practicum component, students apply the concepts and skills they have learned to a field experience in independent teaching, and may also benefit from a brief experience as a pre-faculty intern at a partner institution.

The Graduate School coordinates the program and issues the certificate, with individual academic departments contributing elective courses. A program committee of six faculty and administrators monitors program quality, admissions, program completion, approval of electives, and endorsements of field experiences.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Design of certificate to supplement Ph.D. and show knowledge of key skill areas; does not lengthen the time to degree or increase tuition costs; eligibility for attractive pre-faculty internships at partner institutions; increased job marketability and debunking of common myths about qualifications of minority applicants seeking faculty positions.

Participants: Participants are highly motivated and take considerable pride in participating in a program that has national visibility and leadership.

New Student Orientation Program

Howard University

DATE ESTABLISHED: REVISED IN 2001 **BUDGET: $$$** **STAFFING: [ ] < >**

The New Student Orientation Program is designed to welcome graduate students to the university community and acclimate them to policies and procedures designed to facilitate their transition into graduate school. The program has existed in various forms since the early 1970's and was redesigned in 2001.

WHY IS THIS A BEST PRACTICE?

- strong and active peer mentoring component
- creative seminars and workshops that focus on students' academic, personal, and social/cultural needs
- allows the Graduate School to showcase itself as an agency for student success

A unique aspect of the program is a peer mentoring component that introduces first-year students to formalized mentoring. Advanced graduate students are paired with new students, forming a partnerships that continue throughout the year with regularly scheduled meetings and follow-up activities.

The current orientation program takes place over two days, culminating on the Friday before the start of classes. The program involves speakers and workshop topics germane to students' navigation of graduate school, including representatives from various campus units who discuss the graduate school process. Signature aspects of the workshops include meeting the senior leadership of the graduate school, interacting with faculty, and learning the history of the university. In previous years, orientation involved five days of workshops and seminars on the various aspects and stages of the graduate school process; ways to develop a program of study; the history of the university; time and stress management; and the Myers-Briggs Type Indicator, a career-profiling tool. In a workshop titled "Creating Your Own Graduate School," crossdisciplinary teams designed an ideal graduate school experience.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Early introduction for graduate students to supportive academic leaders and dedicated graduate school staff; strategic emphasis on team-building and networking beyond one's discipline; explicitly presented practical strategies for managing time, stress, and the ins and outs of programs of study; committed participation by top faculty in a range of disciplines; the inclusion of all graduate students (not just new students) at many events.

Participants: Genuine student and faculty interest in and enthusiasm for the orientation; open, honest discussion at small-scale sessions of issues and questions about graduate school that individual graduate students might otherwise find difficult to address.

Research in Teaching and Learning Awards

Howard University

DATE ESTABLISHED: 2002 **BUDGET: $$$$** **STAFFING: [ ] < >**

The Research in Teaching and Learning Awards Program supports modest research projects, conducted jointly by faculty members and doctoral students, on undergraduate teaching and learning issues. The program attempts to bridge the gap between academic research in the disciplines and the teaching functions of graduate students and faculty. Through the joint research effort, both parties work as colleagues to reinforce undergraduate students' acquisition of the language, theory, and problems of their disciplines.

WHY IS THIS A BEST PRACTICE?

- student-faculty team approach
- criteria-based opportunity for more deliberate preparation of doctoral students
- research orientation to discipline-specific, instructional, and curricular development
- public recognition of award teams
- collaborations with faculty and graduate students at other colleges and universities
- potential impact on student learning and scholarly teaching of underrepresented groups

Competitive $1,000 awards are awarded to student/faculty teams who investigate techniques for improving undergraduates' academic performance. In many cases, the student may already be working for the faculty member as a teaching assistant or associate. Teams submit proposals to the coordinator of the Preparing Future Faculty Program for review by a panel of faculty and administrators, with subsequent approval by the graduate dean.

Award criteria include potential impact on undergraduate learning; evidence of close interaction between the faculty member and the student on research and professional development; a compelling argument for the research problem; and the project's measurable contribution to teaching and learning in the discipline.

Approximately four to six awards are given each year. At a series of roundtables, award recipients explain the design and conduct of their research to Preparing Future Faculty students and faculty mentors and the graduate community. The teams' yearlong efforts culminate in the presentation of findings at public symposia often complemented by a nationally recognized expert in the Scholarship of Teaching and Learning (SoTL). Speakers at these events have included Lee Shulman, Barbara Cambridge, Mary Huber, and Pat Hutchings.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Graduate school's commitment to improving doctoral students' professional development; strong existing literature on, and national recognition of, the scholarship of teaching and learning movement.

Participants: Strong interest from student and faculty participants in improving course instruction and undergraduate learning.

Future Faculty Teaching Fellowship Program

Indiana University
http://www.indiana.edu/~grdschl/fftfinfo.html

DATE ESTABLISHED: 1998 **BUDGET: $$$$$** **STAFFING: [ ]**

WHY IS THIS A BEST PRACTICE?

- internal institutional funding support for former externally funded program
- graduate students' immersion into academic setting different from the university
- institutional commitment to teaching in academic settings beyond research-intensive institutions
- faculty mentoring component

The Future Faculty Teaching Fellowships, an intercampus teaching program, prepares up to 20 advanced doctoral students at the main campus of a large university system for faculty careers by providing in-depth experiences of faculty life in other academic environments. The commitment requires each fellow to relocate to another host institution for at least one semester and as much as one year. Fellows teach (with full responsibility) two courses a semester at the host campus or college where they are placed and participate in faculty service activities, such as serving on committees and attending faculty meetings. The host department assigns each fellow a faculty mentor.

Before beginning their teaching assignments, fellows attend a three-day institute organized by the Faculty Colloquium on Excellence in Teaching (FACET) to learn more about different academic environments. Faculty from host institutions whom their peers have selected as outstanding teachers, along with past fellows, serve as speakers at the institute.

To qualify for the fellowship, students must have completed prelims and a pedagogy course at the university, and have one year of college-level teaching experience. Program staff send collected applications to department chairs at host institutions, and these department chairs interview and select candidates. A 20-person steering committee, which includes at least one faculty representative from each host institution and faculty members from the main campus, oversees the program.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Level of faculty participation in mentoring; individualized attention given to each fellow; student impetus (the idea originated with a group of students who approached the Board of Trustees); multicampus focus.

Participants: Students' strong interest in teaching, love of their disciplines, and commitment to becoming good teachers.

Scholarship of Teaching and Learning Program

Indiana University
http://www.indiana.edu/~sotl

DATE ESTABLISHED: 1998 **BUDGET: $$$$$** **STAFFING: [ ] < >**

Originally created for faculty, the Scholarship of Teaching and Learning (SOTL) Program formally extends professional development activities to graduate students who are interested in improving undergraduate education. The program offers both a forum for scholarly presentations and workshops on teaching and learning issues. Graduate students work with faculty on presentations, workshops, and small group discussions, garnering a new perspective on teaching and learning, and scholarship. Graduate students comprise one-third of the attendance at each major presentation.

WHY IS THIS A BEST PRACTICE?

- recipient of 2003 Hesburgh Award for faculty development that strengthens undergraduate teaching tradition in U.S. colleges and universities
- minimal cost for student participation
- variety of assessment measures used, including course portfolios

SOTL offers numerous workshops and small group discussions each year on the development of scholarship in teaching and learning, including a review of scholarly literature, research methods, ethical requirements, and funding opportunities. These are complemented by ten larger-scale presentations of original research on teaching and learning. The program formally invites graduate students to all SOTL activities, where they hear discussion on topics that relate teaching and learning to daily faculty life: the tenure process, a scholarly approach to teaching, philosophies of education, and the changing demographics of students and faculty, along with tips on finding mentors, applying research theory, becoming a part of the academic community, and creating items for the vita. The 20-member SOTL Advisory Council is composed of deans, endowed professors, and faculty known for their teaching. A six-member committee leads focused initiatives.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Friday lunch-hour presentations (convenience of time slot, buffet lunch); balance between presentations/workshops on theoretical issues and direct application of topics; interactive workshops and small group discussions; opportunities for graduate students to interact with faculty members who share their interest in teaching.

Participants: Genuine interest in teaching by graduate students who spend considerable time on their own teaching (and who, in many cases, have intentionally chosen teaching-intensive fields); perception that discussions of and research on teaching have practical application.

Entering the Professoriate

Princeton University
http://web.princeton.edu/sites/mcgraw/preparing%20the%20future%20professoriate.htm

DATE ESTABLISHED: SPRING 2002 **BUDGET: $** **STAFFING:**

"Entering the Professoriate," a four-week mini-course offered during the spring term, provides additional professional preparation for advanced doctoral students who are assuming their first post-graduate academic appointments the following academic year. The course seeks to fill a gap in the transition between the world of the graduate student and that of the new faculty member.

WHY IS THIS A BEST PRACTICE?

- emphasis on practical professional preparation for doctoral students who have already committed to faculty positions
- interactive nature of individual sessions (allows for peer networking and support)

Housed in the university's center for teaching and learning, the course addresses expectations for professional advancement; presents aspects of promotion and tenure; examines the necessary balance between professional activities; explores how students learn; provides a profile of today's undergraduate student; and offers suggestions on preparing and delivering courses. Seminar participants receive a reader of materials and take part in hands-on activities, including analysis of and presentations on case studies. Between sessions, participants continue their dialogue through an online discussion forum using Blackboard course management software.

In spring 2003, four sessions were offered. In session one, participants introduced themselves to others and reflected on their teaching objectives. Session two involved discussions of what beginning faculty should know about promotion and tenure processes, particularly the respective roles of faculty and their department chairs in these processes; the place of service in the academy and in the tenure process was also discussed. Session three emphasized the significance of learning styles and examined different approaches to teaching and learning. The fourth and final session focused on planning a course, designing a syllabus, and developing pedagogical strategies for effective teaching.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Interdisciplinary range of participants; interactive design of sessions; design of sessions to address specific practical issues in faculty life.

Participants: Students' willingness to share personal stories, backgrounds, concerns, and issues; students' comfort with interactive nature of sessions; students' persistence in completing all four sessions over the course of the semester.

Humanities Out There (H.O.T.)

The University of California at Irvine
http://yoda.hnet.uci.edu/hot/

DATE ESTABLISHED: 1997 **BUDGET: $$$$** **STAFFING: + [ ] + 8<**

Humanities Out There (H.O.T.) aims to create innovative K–12 curricula that increase literacy, develop disciplinary competency in English language arts and history/social sciences, and encourage reading and writing across the humanities curriculum while primarily targeting English language learners. Graduate students work closely with K–12 teachers and faculty to achieve a deeper understanding of both disciplinary research and K–12 classroom practice. They then retool their own disciplinary understandings for new K–12 applications, learning at the same time to apply social science research methods.

WHY IS THIS A BEST PRACTICE?

- school-university engagement of faculty, doctoral students, undergraduates, and K–12 teachers and students in a single educational collaboration to improve K–12 education
- active leadership role of graduate students
- focus on the humanities disciplines

Graduate students, under the guidance of lead teachers and university faculty, design and test inventive age-appropriate curricula (using state standards) by leading workshops in a K–12 classroom with the assistance of five undergraduate tutors who run break-out discussion groups. Once tested in the classroom over the course of several academic quarters, the curricula are refined and published.

Graduate students, recruited from the School of Humanities, meet with host teachers to discuss content and objectives, develop assignments, train and supervise a team of undergraduate tutors, and teach a unit once a week for five weeks. In addition, they attend a yearlong seminar on humanities and the public sphere, which includes readings in public and educational policy and theory; presentations by specialists in visual resources, English language learning, and assessment methods; and in-depth discussion on formative evaluation.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Synergy among graduate student leaders; sense of ownership and responsibility; program's ability to integrate disciplinary content with classroom work; opportunities for creativity in developing units.

Participants: Commitment of graduate student participants to the project and their intellectual excitement about bringing the university to the K–12 classroom; background of many leaders grounded in social activism or research interests in minority issues; willingness of participants to shape the future of H.O.T.

Lead Graduate Teacher Network

The University of Colorado at Boulder
http://www.colorado.edu/gtp/programs/lead/index.html

DATE ESTABLISHED: 1992 **BUDGET: $$$$$** **STAFFING: [ ] + < >**

WHY IS THIS A BEST PRACTICE?

- focus on graduate students as proactive change agents within departments
- emphasis on transferability of teaching and leadership skills to a range of careers
- opportunity to improve teaching assistant development at the department level
- wide range of assessment measures used

The Lead Graduate Teacher network gives advanced graduate students (Leads) yearlong pedagogical support to enhance their future roles as both faculty and academic administrators. Approximately 45 Leads each year take part in a one-week, "train-the-trainer" session, in which they create a plan for departmental and group activities in consultation with their chair and academic advisor. They then contribute to their departments' teaching assistant training efforts throughout the academic year, with ongoing workshops and "Friday Forums" to complement the Leads' activities. More than 500 students have participated in the program over the past decade.

Each Lead spends an average of two hours each week on teacher training activities in her or his home department. A Lead Coordinator trains, manages, and consults with lead teachers throughout the year. A faculty steering committee oversees the network.

The network has been instrumental in establishing "communities of scholars" across all disciplines and shifting the campus culture from a teaching-centered focus to a learning-centered one. Organized into disciplinary cluster "pods," Leads not only help improve the discipline-specific and general instructional skills for graduate instructors at UCB, but also measurably enhance their own pedagogical and academic leadership skills. Numerous workshops, pedagogy courses, and other products now operating in departments attest to the Leads' vision and productivity.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Graduate school support; consistent but non-directive centralized coordination, helping Leads stimulate departmental activity regardless of personnel/political changes; cross-disciplinary and interdepartmental interactions, reinforcing Leads' participation in a community of scholars beyond their individual departments.

Participants: Highly selective participation in the network; Leads' belief in a culture of collaboration, inquiry, and reflection, and their willingness to seek help from one another; Leads' ability to nurture subcultures within their departments that remain connected, often beyond graduation.

Seminar on College Teaching: Preparing Future Faculty

The University of Michigan
http://www.crlt.umich.edu/gsis/teaching_seminar.html

DATE ESTABLISHED: 1998 **BUDGET: $$$$$** **STAFFING:** [ ] < >

The Seminar on College Teaching, an intensive, five-week program that prepares 45 advanced doctoral candidates across all disciplines for their first faculty jobs, is the university's primary institutional initiative for preparing future faculty. Sponsored by the Rackham School of Graduate Studies and the Center for Research on Learning and Teaching (CRLT), the program includes several components: faculty-led seminars on higher education; preparation for the academic job search and effective, reflective teaching; site visits to local liberal arts colleges and comprehensive universities; and breakfast or lunch discussions. Students who have prior teaching experience are eligible to apply and are screened by a committee of alumni, with final acceptance decisions made by CRLT staff. Participants who attend all seminar sessions, complete all assignments, and create a syllabus, teaching philosophy, and portfolio are named Michigan Teaching Fellows.

WHY IS THIS A BEST PRACTICE?

- emphasis on scholarship of teaching and learning
- institutional funding to secure for the long term a program formerly funded by national Preparing Future Faculty initiative
- one-month alternative to similar yearlong programs, with similar results
- range of assessment instruments and incorporation of results

The non-credit seminar meets two days. Seminar topics include tenure, faculty life, higher education, instructional technology, course planning, and the job search. Attention to diversity is woven throughout the curriculum.

The success of the seminar has spawned two new programs at the university: a one-day Preparing Future Faculty Conference and a mini-mentorship program for graduate students.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Clear organization and structure; condensed one-month format with effective time management; emphasis on practical career and pedagogical information, including elements of multicultural teaching/learning; opportunity for student interaction and networking.

Participants: Diversity in discipline and undergraduate background, as well as demographic diversity; best of an applicant pool of 100 (top 45); strong commitment to teaching, with many participants having sought out teaching opportunities that were not otherwise provided.

Faculty Conversations on the Academic Job Search and Academic Life

The University of Pennsylvania
http://www.upenn.edu/careerservices/gradstud/FacultyConversations.pdf

DATE ESTABLISHED: 1996 **BUDGET: $** **STAFFING: + [ ]**

WHY IS THIS A BEST PRACTICE?

- inclusion of information about teaching opportunities at different types of institutions
- emphasis on both job search and faculty life
- practice interconnection to larger Academic Career Conference

The Faculty Conversations series aims to provide doctoral students and postdoctoral fellows with information needed to manage a successful academic job search in a variety of higher education settings. The series features university faculty members and administrators, as well as representatives of other colleges and institutions, who speak both on the job search and on other aspects of academic life. This series provides detailed information about general topics previously discussed in an annual fall Academic Career Conference. Each session is audiotaped; graduate students may then borrow the tapes from Career Services.

Each spring semester, six to nine seminars in the Faculty Conversations series address topics including conference/campus interviews for various academic settings; job talks; the workings of a search committee; negotiating job offers; the tenure process; how to make the most of the first year; dual-career searches for couples; children/families in an academic life; and how to balance professional and personal responsibilities. Each hour-long seminar, offered during lunchtime, takes place at the new Graduate Student Center or another central location, with an average attendance of 50+ students at each session.

The Academic Career Conference, a predecessor program to the Faculty Conversations, is a three-week, four-part series of panel discussions by faculty and administrators. Part I discusses finishing the dissertation; part II discusses interviewing and identifying a job search committee; part III gives advice on advisors and committees for first- and second-year doctoral students; and part IV focuses on current trends in higher education, like dual career couples and one-year positions).

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Interesting and urgent topics for students; convenient lunch-hour timing; staff autonomy to plan programs within Career Services.

Participants: Students' genuine concern with and interest in topics addressed; strong student engagement in discussion and appreciation for speakers (applause and positive anecdotal feedback); students' engagement (at least mentally) in the job process.

International Teaching Assistant Assessment

The University of Texas at Austin
http://ita.io.utexas.edu

DATE ESTABLISHED: 1989 **BUDGET: $$$$$** **STAFFING: <30 +**

WHY IS THIS A BEST PRACTICE?

- depth and breadth of assessment measures
- transferability of assessment measures to other settings and kinds of doctoral practices
- diverse and particularly complementary program components

The International Teaching Assistant Training program certifies more than 500 International Teaching Assistants (ITAs) each year in instructional development and English usage skills. Remarkable for its emphasis on assessment, the program relies on a comprehensive set of activities for international doctoral students: an Oral English Proficiency Assessment, an International Teaching Assistant Workshop, and a credit-bearing, research-based course titled "Communication and Culture for University Teaching."

To meet TA requirements set by the state of Texas, graduate students who are not native English speakers are required to take and pass an English Proficiency Assessment. Those who pass then enroll in a workshop on university policies and customs, American culture, the academic values and social backgrounds of undergraduates, and accepted U.S. teaching styles and teacher/student interactions.

Students who pass the English Proficiency Assessment on a conditional basis must register for a course on "Communication and Culture in U.S. Teaching," before enrolling in the workshop. In this course, students focus on linguistic, cultural, and pedagogical aspects of university classroom teaching. Many departments have nominated ITAs who have participated in the course and/or workshop for teaching excellence awards, attesting to the program's success. Faculty and departments both support and participate in various program components because they have a high stake in ITAs' success in undergraduate classrooms.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Centralization in/support from the Office of Graduate Studies; strong departmental stake in program outcomes and collaboration in program activities; respect for the program's academic rigor; reduction in the number of complaints from undergraduates regarding the comprehensibility of their ITAs.

Participants: Strong motivation and willing compliance of ITAs (even those who are reluctant at first quickly embrace the tangible benefits, as noted in their workshop evaluations); faculty investment in and support of the program's requirements.

Huckabay Fellowship Program: Preparing Future Faculty

The University of Washington
http://www.grad.washington.edu/pff/huckabay.htm

DATE ESTABLISHED: 1996 **BUDGET: $$$$$** **STAFFING: [ ]**

WHY IS THIS A BEST PRACTICE?

- focus on student-generated, original projects
- compensation for students
- collaboration with faculty mentors
- endowment support targeted by the Graduate School for promotion of teaching and learning

The Huckabay Fellowship Program prepares doctoral students to teach and mentor as college or university faculty. Doctoral students identify specific teaching and learning projects and then seek a faculty member—either from the university or from another nearby community college, four-year college, or university—to serve as a teaching mentor and project collaborator. Each year, nine student/faculty teams receive the fellowship for one academic quarter; to date, 72 student/faculty teams from across the range of disciplines have participated.

Participants typically design an undergraduate course in their discipline that they may later teach, or explore new avenues of instruction (e.g., application of instructional technology, online teaching, or pedagogical uses of various media). Central to the program is a mandatory Teaching Mentorship Seminar that meets once a week for two hours throughout the academic quarter.

As part of the application for the fellowship, doctoral students must describe their specific project, their teaching background, and their chosen Teaching Mentor. Mentors also must describe their plans for improving the teaching skills of their student collaborators. The multidisciplinary selection committee consists of faculty with expertise in innovation and teaching, a representative from the Center for Instructional Development and Research, and a former Huckabay Fellow.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Students' opportunity to explore otherwise unlikely instructional experiences; a supportive forum (the Teaching Mentorship Seminar); flexibility for each student to take fellowship funds during the quarter that is most conducive to her/his goals; Graduate School's commitment to teaching innovations and activities beyond the departmental scope; competitive compensation for students.

Participants: Previous teaching experience, life experience, and some length of experience in and enthusiasm for graduate studies; curiosity, receptiveness to new ideas, ability to collaborate with faculty and other graduate students about teaching, and good listening.

Guide to Graduate Student Life

The University of Wisconsin at Madison
http://info.gradsch.wisc.edu/admin/gsc/gradguide/index.html

DATE ESTABLISHED: 1999 **BUDGET: $$$$** **STAFFING: <>**

The Guide to Graduate Student Life is a handbook (now in its third edition) written by a subcommittee of the Graduate Student Council, a student organization dedicated to serving the needs of graduate students from all university departments and divisions. The 5,000-copy publication is written, edited, designed, and published entirely by graduate students. The final publication is distributed to students at the new graduate student orientation in August (attended by about 800 graduate students) and throughout the year by graduate coordinators within academic departments. In addition, the publication is available online for viewing and/or downloading. Originally conceived as a Web site, the *Guide* has evolved into a book format through generous grant funding.

WHY IS THIS A BEST PRACTICE?

- publication created solely by graduate students for graduate students
- oversight of project by graduate student coordinator
- collaborative funding sources

In January of each year, an email is sent to the 1,500 members of the Graduate Student Council, asking for testimonials, photographs, chapter content, and/or graphic designs related to the previous year. All submissions are evaluated by the graduate student project assistant, who then formats and edits drafts of the final publication. The publication contains chapters titled *Getting Started*, *Life in Madison* and *Wisconsin*, *For International Students*, *Planning Ahead*, *Student Life*, *More About Student Life*, *Living Well*, and *Enjoying Life in Madison*.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Well-structured, polished finished product; adjustments and improvements over three editions; students writing for a student audience.

Participants: Central coordination by one project assistant; commitment of students who volunteer submissions.

FEAST Student-Faculty Lunch Program

Yale University

DATE ESTABLISHED: 1998 **BUDGET: $$$** **STAFFING: [ ]**

FEAST ("Free Eating Attracts Students and Teachers") began in 1998 as part of the Yale Graduate School's ongoing effort to create strong mentoring relationships and a community of scholars. This program offers free lunches to one graduate faculty member meeting with one or two graduate students in the graduate school dining room. FEAST encourages informal interactions between graduate students and graduate faculty. Doctoral students and faculty members meet to learn about each other's work, teaching, careers, and lives.

WHY IS THIS A BEST PRACTICE?

- minimal funding needs
- informal but purposeful interaction between graduate students and faculty
- initiation of interaction by either students or faculty members

Every graduate student and faculty member in the Graduate School is entitled to two free FEAST cards each semester. The Office of the Graduate Dean pays for the program. The dean promotes it through reminders in monthly letters to the students, and through informal contact with faculty members. The Graduate Center staff produces the paper tickets each year and distributes them to students through the Office of Student Life in the Graduate Student Center. Individual departments' directors of graduate studies promote the program to their students and faculty members. Either the faculty member or the graduate students may initiate the invitation.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Perception of the program as non-threatening and appropriate for both students and faculty members; allowing up to two students to dine with each faculty member provides safety in numbers for students; encouragement to meet informally in a safe, public space where participants are on equal footing; high level of support and promotion by the graduate dean and directors of graduate studies within individual academic departments.

Participants: Informality of mealtime conversation (common and comfortable for students); convenience of mealtime meetings (even for off-campus students) during the course of the day; long-term investment in the mentoring relationship.

McDougal Graduate Student Center Fellows

Yale University
http://www.yale.edu/graduateschool/mcdougal

DATE ESTABLISHED: 1996 **BUDGET: $$$$$** **STAFFING: [ ]**

The McDougal Graduate Student Center offers graduate students resources on teaching, careers, and graduate student life. McDougal Fellows coordinate student-run programming and events at the center, including social, cultural, community service, literary, wellness, and professional development activities. Fellows also manage a student-run café in the center lounge area, serve as contacts for students who have questions about graduate life and study, and serve as leaders during New Student Orientation at the Graduate School.

WHY IS THIS A BEST PRACTICE?

- student involvement in organizing and managing events/programs for peers
- one component of a comprehensive graduate student facility
- focus on development of lifelong skills for careers both inside and outside the academy

Between 12 and 16 graduate student fellows are appointed annually, receiving a modest honorarium of $3,800 per year along with any regular tuition fellowships and/or stipends. Fellows may serve up to three years, but must reapply and re-interview each year. The topics of programs and events developed and led by fellows—usually in teams of two—include academic writing and publishing; the academic job search; advising; family and relationship issues; professional skill development (computers, resumé, interviewing, career options); cultural adjustment; social/personal networking; the balance between school and personal life; health and wellness; sports and recreation; and service to the wider community. While such programs serve all students, some programming specifically focuses on international students, women, students of color, students with spouses, partners and/or children, and LGBT students.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Significant independence for fellows to identify student needs and wants; support from the Office of the Dean; vision and financial support from a donor who was committed to the importance of tending to graduate students' professional and personal development.

Participants: Students' interest in creating a community across disciplines; fellows' engagement as full-time, dedicated graduate students; fellows' range of talents and experiences, as well as interest in new directions for individual professional development.

Summer Multicultural Access to Research Training

The University of Colorado at Boulder
http://www.colorado.edu/graduateschool/SMART/SMARTWebsite

DATE ESTABLISHED: 1989 **BUDGET: $$$$$** **STAFFING: [ ] + < > + 8 < > *(event only)***

The Summer Multicultural Access to Research Training (SMART) program aims to increase the diversity of doctoral graduates and future faculty members through a ten-week, faculty-mentored research experience for talented undergraduate interns interested in pursuing graduate education. Intensive research training and a workshop series prepare students for graduate school and for the professoriate. At an annual year-end symposium, interns present results of their research to the university community. SMART is a component of the larger Alliance for Graduate Education and the Professoriate (AGEP), a program funded with a grant from the National Science Foundation to increase diversity in science, technology, engineering, and mathematics fields.

WHY IS THIS A BEST PRACTICE?

- focus on comprehensive preparation of undergraduates for graduate-level work
- focus on research component of graduate training
- involvement of institutions across the country
- vertical integration: graduate students serve as mentors to undergraduate interns, as do faculty

Mentoring and hands-on experience allow SMART participants to learn complex procedures related to research, teaching, and admission to graduate school. Interns spend approximately 35 hours each week on research. During the "Preparing for Graduate School" workshop series, participants prepare for taking the GRE, applying to graduate school, and obtaining financial aid.

Up to 25 upper-level undergraduate students (from institutions across the U.S.) are chosen to participate in the program, for which they earn three hours of undergraduate credit. Local faculty take such great interest in participating that the program cannot always accommodate all potential mentors. Many students find that SMART provides them with an enthusiastic community and supportive network in which to pursue their educational goals.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Support from faculty mentors and higher levels of the institution (provost, chancellor, graduate dean); mentors' willingness to participate (common in the sciences).

Participants: Diversity of students and of institutions they represent (only three have come from the host institution); diversity of institutional types represented (HBCU, small college, urban, research I, public, private, etc.).

Students of Color of Rackham (SCOR) Conference

The University of Michigan
http://www.umich.edu/~scorweb/

DATE ESTABLISHED: 1990 **BUDGET: $$$$$** **STAFFING: <13>**

The annual Students of Color of Rackham (SCOR) Conference showcases scholarly research, workshops on academic life, and seminars on issues that affect communities of color—one of a handful of national conferences at which graduate and professional students from populations historically underrepresented in higher education can exchange information about their academic and life experiences, and the largest such event run by students. The three-day interdisciplinary event includes workshops and roundtables, paper and poster presentations, speakers, networking opportunities, and paper and presentation competitions.

WHY IS THIS A BEST PRACTICE?

- student-initiated and organized for more than 14 years
- empowers students to promote their scholarship, research, and professional development
- develops leadership and networking skills
- financial support from diverse academic departments and the Graduate School

The conference is organized and implemented by Students of Color of Rackham (SCOR), an autonomous graduate student body representing more than 700 graduate students of color at the university. The event, held every February, averages more than 250 attendees from 25 colleges and universities across the country. While organizers welcome students from all disciplines, most presenters and speakers come from the humanities and social sciences.

Although the conference theme changes each year, presentation topics usually address issues such as the development of scholarship, women of color in the academy, post-doc positions, sexual orientation in the academy, affirmative action, approaches to job talks and other presentations of work, grantwriting, issues in Latino studies, and issues of diversity in the classroom for graduate student instructors.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: High level of involvement and funding support from so many departments; concern of key university leaders about diversity; faculty willingness to moderate panels and read papers (creates a high level of academic integrity); range and number of presentations.

Participants: Professionalism of the conference draws student participants who care about their work and are bringing top quality presentations/topics to the conference; competence and diligence of SCOR coordinators.

Summer Institute for New Merit Fellows

The University of Michigan
http://www.rackham.umich.edu/Recruitment/guideln/si.html

DATE ESTABLISHED: 1987 **BUDGET: $$$$$** **STAFFING: [ ]**

The Summer Institute for New Merit Fellows (SI) works with new doctoral and MFA students from groups that are historically underrepresented in their disciplines. The optional eight-week program, which annually accepts up to 50 students in the summer before their first semester of graduate school, helps prepare participants for the intellectual, professional, and social transition into their degree programs.

WHY IS THIS A BEST PRACTICE?

- focus on underrepresentation within disciplines
- strong assessment measures drawn from results of dissertation study on the program
- practical introduction to the nature of graduate school, empowering students to make better choices and formulate strategies for progress

Beginning in late June and ending in mid-August, the Institute enrolls fellows in an advanced language preparation study (for humanities majors), research methodology course (for social science majors), or a science ethics course (for science and engineering majors). In biweekly seminars and activities, fellows cover such topics as financial survival, career planning, diversity and affirmative action issues, and the basics of academic writing. Each student participant receives a stipend, health insurance, and a tuition waiver.

Paid graduate student coordinators manage the Summer Institutes, a component of the Rackham Merit Fellowship program, and one faculty member serves as the faculty coordinator and advisor to the program. A committee composed of the program director(s) and past SI student coordinators hires the graduate student coordinators through a formal application process. The faculty coordinator recruits other faculty members to serve as discussion facilitators, directs the staff in the design of seminars, advises SI participants, participates in weekly SI staff meetings, and fosters relationships with departments. Interest in the program is significant, with requests for involvement frequently exceeding capacity.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Support/funding from administrative leaders; a combination of the "right staff, right attitude, and honest communication"; requirement of a contract between student and program, including consistent participation (must attend all SI sessions); a program template that lays the groundwork for continuity from director to director; a high level of communication with students before they arrive on campus.

Participants: Participants' eagerness for the opportunity; graduate student coordinators' complementary strengths and savvy about participants' needs.

Student and Faculty Advisory Boards for Graduate Opportunity Minority Achievement Program (GO-MAP)

The University of Washington
http://www.grad.washington.edu/gomap/default.htm

DATE ESTABLISHED: 1999 **BUDGET: $$$$$** **STAFFING: +<>**

The Student and Faculty Advisory Boards support the Graduate Opportunities and Minority Achievement Program (GO-MAP), a comprehensive unit within the UW Graduate School dedicated to recruiting and retaining graduate students from underrepresented groups. The Faculty Advisory Board and the Student Advisory Board work both independently and together on activities, events, and programs that further GO-MAP's goals, improving the campus climate for all students through the asset of diversity.

WHY IS THIS A BEST PRACTICE?

- collaboration among graduate students and faculty (within each group and across groups)
- opportunities for graduate student leadership roles in program and campus activities
- peer management of student board (through graduate assistant program coordinators)
- replicability of student and faculty board concept to other practices in doctoral education

Faculty board members either volunteer themselves or are invited to serve based on their reputation for understanding departmental and organizational change as it applies to minority recruitment and retention. Members must attend one of the four GO-MAP signature events, participate in an additional GO-MAP planned activity, serve on an ad hoc subcommittee as needed, and identify colleagues to participate in GO-MAP. Student members self-identify through an email invitation. Two graduate student assistant coordinators who assist with the signature events of GO-MAP also convene and manage the board meetings. In addition to planning and participating in GO-MAP events, the board creates opportunities for networking across departments and connecting with minority communities outside the university.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Inclusion of both faculty and graduate students; clarity about and flexibility of board participation; meeting venue for those concerned about recruiting and retaining minority and underrepresented students; opportunity to centralize program within a culture of decentralization; programming and networking efforts by GO-MAP staff.

Participants: High levels of energy and activism from self-identified students and faculty members; board members' strong interest in professional and leadership development for graduate students and community connections both on and off campus; understanding of the challenges of institutional change, dedication to change processes, and attentiveness to mentoring others as a mission.

Partners for Success

The University of Wisconsin at Madison
http://info.gradsch.wisc.edu/admin/diversity/partners/index.html

DATE ESTABLISHED: 1999 **BUDGET: $$$$$** **STAFFING: +<>**

WHY IS THIS A BEST PRACTICE?

- peer support and mentoring focus
- inclusion of training for mentors in the mentoring component
- automated formal application process (with direct download into office database for matching Partners)

Partners for Success, a voluntary program, matches new graduate students of color with continuing graduate students, as well as some faculty and recent alumni, who serve as mentors. A component of the wider university initiative on diversity and inclusiveness, the program provides professional, social, and educational networks that support new students' transition to graduate school. The program focuses on the six stages of relationship with the university: recruitment, admission, academic advancement, retention, exit, and re-affiliation as an alumnus. Programming includes monthly workshops, social activities, and large group outings that help acclimate students. A doctoral student serves as project assistant and coordinator.

Students are matched—by gender, race, and/or discipline—with potential Partners (fellow graduate students) who introduce them to graduate school through events including:

- a formal reception at the beginning of the academic year, which welcomes and matches up to 150 new and continuing Partners;
- a formal reception hosted by the UW Graduate School;
- a spring seminar on issues related to success in graduate school;
- informal social activities throughout the course of the program, including First Fridays socials.

Students attend a three-hour training session focused on their role as mentors and then meet once each semester to touch base. Each week, an ongoing email discussion offers opportunities for virtual meetings. One face-to-face meeting is scheduled each month.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: "Heartfelt expression of outreach" that is felt by participants; outreach to both incoming and continuing students; combination and balance of formal and informal events and activities; activities simple and compatible with hectic graduate schedules.

Participants: Students' belief in/identification with the genuine welcome the program extends; students' commitment—due to previous positive mentoring experiences—to giving back by becoming mentors themselves.

Conference on Graduate Education

Washington University in St. Louis

DATE ESTABLISHED: 2001 **BUDGET: $$$$$** **STAFFING: + [ ]**

The Conference on Graduate Education introduces the option of graduate school to undergraduates from underrepresented racial and ethnic groups, with the goal of encouraging them to pursue a graduate or professional degree. Specifically, the conference is a partnership between the Chancellor of Washington University in St. Louis and the director of Target Hope, a nonprofit, Chicago-area college preparatory program that recruits high school students of color and places them in undergraduate programs around the country.

WHY IS THIS A BEST PRACTICE?

- focus on undergraduate recruitment to graduate school
- focus on underrepresented populations
- level of graduate student engagement in conference as hosts and presenters

Conference participants are alumni of the college preparatory program who have either graduated from college or are currently enrolled and are interested in learning more about graduate school. Conference activities include an overview of funding for graduate school, a panel discussion by graduate and professional students, lectures from faculty on the benefits of graduate school and how best to prepare, and school tours. Chancellor's Graduate Fellows—participants in a program aimed at increasing the number of graduate students who contribute to diversity in graduate education at Washington University and who are seeking faculty careers—assist at the conference as hosts and presenters along with other graduate students.

Conducted during late May or early June, the three-day conference draws up to 100 undergraduate students of color (primarily at the junior and senior level) each year.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Formal and informal contact with graduate students by conference participants; formal interaction with faculty of color whom participants view as role models; adequate funding.

Participants: Undergraduates' preparation, by Target Hope, in etiquette and professionalism; students' appreciation and respect; willingness and energy of graduate student hosts, faculty, and staff to represent the university at Target Hope events.

Office of Diversity and Equal Opportunity Fellows Program

Yale University
http://www.yale.edu/graduateschool/diversity/index.html

DATE ESTABLISHED: 2001 **BUDGET: $$$$$** **STAFFING: + [ ]**

The Office of Diversity and Equal Opportunity (ODEO) Fellows program provides minority and other underrepresented graduate students with peer mentoring and programming. Fellows are doctoral students themselves who both develop programming and serve as peer advisors and advocates, helping minority doctoral students access resources and programs for their specific needs and assisting undergraduates interested in graduate school. Nine fellows are chosen each year by a selection committee to plan, implement, and evaluate recruitment and retention programs within the Graduate School for students from underrepresented groups, and for minority students in general. The selection committee includes three current fellows and two advisory committee members.

WHY IS THIS A BEST PRACTICE?

- graduate student participation in and contribution to university recruitment and retention efforts
- development of peer support among underrepresented graduate students
- focus on lifelong skill development useful in a variety of careers

ODEO Fellows are full-time graduate students hired for nine-month appointments (averaging 10 hours per week), which may be extended to a total of two years. They have primary responsibility for developing recruitment and/or retention programs, including the graduate mentoring program, the graduate school application seminar for prospective students, and minority revisitation weekend activities for newly admitted students. Other program topics have included research initiatives, community and university resources for students of color, finding mentors in various fields, grantwriting, fellowship applications, and concerns of junior faculty of color. In addition to developing programs and working with their graduate peers, fellows also attend minority recruitment events across the country.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Availability to fellows of resources to create and implement programs; small institutional setting supports camaraderie among fellows and participants at events; high level of support from graduate dean and administration; sense of community created by McDougal Center itself contributes to students' desire to participate in programs and services.

Participants: Fellows' commitment to program; diversity of fellows' backgrounds, cultural experiences, and disciplinary interests; fellows' level of empowerment.

CONNECTING RESOURCES TO OUTCOMES

Graduate Department Budgeting Allocation

Duke University

DATE ESTABLISHED: 1995 **BUDGET: $** **STAFFING:**

WHY IS THIS A BEST PRACTICE?

- focus on the needs of graduate education itself, rather than on departments' service needs
- creation of departmental ownership and responsibility for graduate-level improvements

The Graduate Department Budgeting Allocation process increases Ph.D. support in graduate departments and programs by providing incentives for departments in the arts and sciences. The Dean of the Graduate School allocates departments' budgets for support of Ph.D. students based on evidence of a) increasing the number of faculty; b) attracting more Ph.D. applicants; c) improving student quality; and d) obtaining external funds to support their students. In doing so, the process rewards departments' efforts to strengthen their graduate programs. As a result, all incoming students receive a standard support package that guarantees funding for at least five—and in some disciplines six—years of doctoral study.

Funding allocations are determined according to the following criteria:

- The total number of student FTE slots provided to a division is based on funds available and the proportion of total arts and sciences tenure-track faculty in that division.
- Within each division, student FTEs are apportioned among departments using a formula based on a) the department's proportion of the division's total number of tenure-track faculty, b) the number of applications for Ph.D. study, c) student quality as determined by the number of competitive fellowships won by Ph.D. students, and d) the number of students supported on external funds (i.e., research or training grants, national fellowships, or endowment funds raised by the department).
- The FTE allocation is redetermined every three years, based on the average of each of the above factors for the preceding three years.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Consistent factor (FTE) for determining allocations; faculty perception of the process as a fair way to reward departments; ease of understanding the allocation process; incentive for decent financial management by departments; support for serious conversations with departments about graduate education issues during the two off-years (in the three-year cycle) when no funding is negotiated.

Participants: Departments' ability to control their own destiny through this process.

Online Graduate Student Demographics

Duke University
http://www.gradschool.duke.edu/About/profile.htm

DATE ESTABLISHED: 2001	BUDGET: $	STAFFING: [ ]

WHY IS THIS A BEST PRACTICE?

- statistical snapshot of individual departments as well as disciplinary clusters
- breadth of demographic student information
- utility as an assessment tool for budgeting and long-term impact of initiatives

The Web-based Online Graduate Student Demographics initiative, part of a broader university examination of graduate education, provides a complete statistical profile of a number of characteristics of all Ph.D. programs and students at the university. The information gathered is used to educate prospective and current students about the challenges and realities of graduate education, and to educate faculty about student performance and expectations within each department.

For the graduate school, for each academic division (humanities, social sciences, physical sciences, and biological sciences), and for each individual degree program or department, the system contains the following information:

- Ph.D. admission and enrollment statistics for the past 10 years, including numbers of applications; offers of admission; new matriculants and full enrollments; numbers of foreign, women, and U.S. minority students; GPA and GRE scores; and numbers of Ph.D. degrees awarded annually;
- median time-to-degree statistics for students earning their Ph.D.s, sorted by department and division to allow for comparison within each division and to national averages;
- placement statistics for granted Ph.D.s, sorted by program and division, indicating types of post-degree employment (non-academic or academic, the latter by Carnegie classification of institution); and
- completion rates for all admitted doctoral students, sorted by department and program.

Statistical information is generated from a database maintained by the graduate school, with additional interfacing from the registrar's office (regarding enrollments), the directors of graduate studies in the individual academic programs (regarding placement statistics), and individual program heads (who are asked to update spreadsheets on all Ph.D. recipients since 1977).

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Existing mechanisms for collecting longitudinal data; impetus and support from the graduate dean; comparative ease of collecting such data in a consistent manner within a relatively small institution; central location of program within the graduate school (allows control of the flow of data); strong institutional commitment to doctoral education (as opposed to the master's level).

Graduate Research Internship Program

The University of Texas at Austin

DATE ESTABLISHED: 1997 **BUDGET: $$$$$** **STAFFING: [ ]**

The Graduate Research Internship (RI) gives control over fellowship awards to individual faculty members who use them to recruit outstanding graduate students to their departments. At the heart of the RI is a one-year, student-centered mentoring relationship that lays the groundwork for the student's academic career and subsequent experiences at the university.

WHY IS THIS A BEST PRACTICE?

- faculty exposure to and engagement in targeted recruiting practices
- greater personal contact between faculty members and new students
- faculty commitment to planning for effective, student-centered mentoring

Each fall, faculty members compete for one of 30 Graduate Research Internships designed for newly admitted graduate students. Faculty committees in each discipline cluster (fine and liberal arts, social sciences, engineering, and science) review the applications.

Each faculty award winner identifies potential student RI candidates from the pool of new graduate applicants and attempts to recruit the student with the offer of the RI position. The faculty member then mentors the RI during the student's first year, introducing him or her to methods, problems, and professional development opportunities in the discipline. Student experiences might include, but are not limited to, introduction to literature, outstanding problems in the field, hands-on experience in the lab, field, or classroom, attendance and presentation at special seminars, participation in professional meetings, and collaboration on a current or new research project with the mentor. The student is not contracted to work a specific number of hours. Rather, the fellowship stimulates a project orientation.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: Fellowship opportunity for new students that does not limit contact with others; good advertising and a good budget; faculty review (not administrative review) of applications; recruitment and admission decisions made entirely by the faculty member.

Participants: Excellence of students selected; students' early commitment to career interests; involvement of active research faculty who have a caring attitude toward graduate students; in fields where external funding is less available (humanities and liberal arts), high faculty interest in and appreciation for the program.

Graduate Funding Initiative

Washington University in St. Louis

DATE ESTABLISHED: 1993 **BUDGET: $** **STAFFING:**

The Graduate Funding Initiative matches newly admitted Ph.D. candidates to university resources, such that every student receives some kind of stipend support (fellowship, teaching, or research assistantship) for at least six years, provided they remain in good academic standing. Fellowship and teaching assistantship funds left unexpended at the end of each academic year support graduate summer stipends. Faculty are strongly committed to this approach, recognizing that new student admission is linked to completion of the doctorate by currently enrolled students.

WHY IS THIS A BEST PRACTICE?

- use of budgeting to shape a learner-centered focus on graduate education
- effort to promote matriculation of all admitted doctoral students
- leads to student collaboration instead of competition for continued funding

A key component in effective functioning of the Graduate Funding Initiative is that a central authority (the graduate school) has primary responsibility for allocating resources. Each year, the overall number of graduate students admitted is based on the division of these resources into tuition remissions and stipends of $10,000 to $16,000 a year for living expenses. Each year, individual departments submit requests for teaching assistants needed for the year, along with written justification for any increase in number over the previous year. Departments are then allocated resources according to disciplinary and market standards; the hiring process is handled at the local level. For the most part, research assistantships are not covered by this funding initiative—outside grant support must be acquired.

WHAT MAKES THIS PROGRAM EFFECTIVE

Program: More and fuller attention given to each doctoral student—a result of the reduced number of doctoral students within each department; centralized control of funding and allocations; composition of the Graduate Council (half faculty and half students); departments' ability to be more selective in admitting students to programs.

Participants: Intellectual maturity and preparedness of students shown at the conclusion of a full six-year program with guaranteed funding; commitment of the advanced graduate students (fourth, fifth, and sixth year) to use their experience in giving back to the university and getting involved in graduate school activities.

www.woodrow.org

THE WOODROW WILSON NATIONAL FELLOWSHIP FOUNDATION