



Communicator

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Reaching Out to Graduate Faculty about Major Issues Facing Graduate Education in the US

Introduction and Background

One of the challenges in a large university such as Ohio State, with more than 10,000 graduate students, 3,000 graduate faculty, and 100 programs, is how to reach out and engage the graduate community in a dialog about major issues facing graduate education. In this article, I report on an experiment that involved establishing a blog (<http://www.gradsch.ohio-state.edu/graduate-school-blog.html>) for the graduate school, contacting all graduate faculty members directly with messages about the major issues, and inviting them to post responses on the blog. These efforts were followed up by inviting faculty to participate in face-to-face forums on professionally oriented master's programs and on future directions for graduate education. My purpose in writing is to share our experiences with Council of Graduate School members. Such sharing is one of the great values of CGS membership and helps us all learn and think about ways to improve our programs and advance graduate education.

The mission of CGS includes advocacy, research, and sharing of best practices for graduate education. Recent CGS activities in all three areas—the *Path Forward* report (2010), legislative forums, and global summits on graduate education—have made clear that this is a time of rapid change in graduate education in the US and in the world. The *Path Forward* report demonstrated the importance of graduate education to develop the highly educated workforce needed to help maintain US competitiveness. At the same time, the projected changes in US demographics will make it imperative for us to attract and retain in graduate school an increasingly diverse pool of students. With an attrition rate for doctoral students exceeding 40%, calls for accountability for the expense and time to complete graduate education are increasing. Finally, other nations are investing significantly in graduate education and recruiting both students and faculty to strengthen their own graduate programs. It is for these reasons that US universities must reassess their approach to graduate education and make changes as necessary. Business as usual cannot continue if we are to maintain our forefront position in graduate education and make critically important contributions to issues facing the country.

The challenge at the campus level is how best to engage the members of the graduate faculty about these important issues.

At Ohio State, the graduate school has had for several years a regular electronic newsletter for communication with the graduate program chairs, coordinators, and department chairs. When I became dean in 2006, I made the decision to meet with the same group on a quarterly basis to discuss current, largely campus-based issues of immediate interest to the workings of our 90+ doctoral and 115 master's programs.

However, the issues described in the *Path Forward* report and other CGS initiatives require reassessment of our graduate efforts at a fundamental level. Because graduate education is actually carried out at the faculty and research group level, we thought it vital to reach out directly to the people working with the students. Since we could not practically call a meeting for more than 3,000 faculty members, we turned to electronic tools.

The Graduate School Blog

After some discussion of our options, we decided to set up a blog in which I, or guest writers, would post articles that describe current challenges, provide access to relevant resources, and that would express an opinion. We opted for a blog because it also gave the university faculty a chance to post their own responses, which we hoped would foster a community-wide discussion.

In our implementation, the blog is also meant to serve as a university-wide portal and resource for information about graduate education that can aid graduate programs in their reassessment of existing programs and development of new ones. It is also open to anyone with access to the Internet, but we targeted the graduate faculty at Ohio State as its main audience by sending the graduate faculty a direct email message each time I enter a new post. In addition, I alerted the entire graduate student population to the existence of the blog through my column in Ohio State's weekly e-newsletter to

continued on next page

INSIDE

New Members	3
Data Sources	4
Pathways through Graduate School and into Careers	6

Reaching Out to Graduate Faculty

graduate and professional students. This column started at the same time as the blog, in January 2011.

The support of the provost throughout the whole process has been very valuable for our efforts. Because this was a new approach to communication with the graduate faculty and because the topics up for discussion were so foundational, I vetted drafts of the initial posts with the provost, vice provosts, and deans of the colleges to get their feedback and so that they were aware of the topics I was raising with the faculty in their colleges and programs.

We have also followed up with open forums for the graduate faculty on specific topics covered in my blog posts, such as professionally oriented master's programs, in the belief that having people meet in person and engage in dialog is a very important part of the process of stimulating the development of new ideas and programs: Plato and predecessors having established the value of this approach a few thousand years ago.

My first posting on the blog (<http://www.gradsch.ohio-state.edu/graduate-school-blog.html>) was on January 31 of this year. I began it by saying it was an experiment to contact faculty members directly and to engage them in important conversations about graduate education. The post cited the *Path Forward* report and noted four topics as examples of issues that the graduate community needed to consider: 1) the importance of graduate education to US competitiveness, 2) the investment and improvement of graduate education being made in other countries, 3) the changing demographics that will require attracting an increasingly diverse pool of graduate students, and 4) the attrition rate problem at the doctoral level.

The post went on to identify important questions that the Ohio State graduate community needed to discuss, such as:

- How should we be preparing our doctoral students for academic/research career opportunities in the 21st century?
- How should we prepare them for non-academic careers, recognizing that is the path half of them will follow?
- What type of professionally oriented master's programs should we develop, in view of the *Path Forward* finding that this is the fastest growing component of graduate education?
- What should our enrollment targets for master's and doctoral students be in the light of projected needs for academic and non-academic employment?

My hope was that the graduate faculty would begin to engage with these larger, foundational questions.

Posting on Professionally Oriented Master's Degrees

My second main posting focused on professionally oriented master's degrees, which, in addition to being the fastest growing part of graduate education, are the ones most directly connected to the economy of Ohio. This is an important factor in terms of the current economic situation and state priorities.

My main goal was to bring the opportunities for development of new programs to the attention of the faculty

and departments and to make clear that the graduate school was available to be a resource and provide support. Ohio State already has 30 master's programs in existence or being developed that we classified as professionally oriented, and the graduate school is aware of interest on campus in developing more. Interestingly, in the context of CGS's efforts on this subject, Ohio State does not have any formal Professional Science Master's (PSM) programs at present. However, we have joined the Professional Science Master's Association to facilitate the development of future PSMs, and we make use of best practice information from CGS to assist people on campus.

Another main point brought out in this post was to emphasize that all graduate programs, master's and doctoral, should be strong and of high quality and that appropriate coordination of master's and doctoral programs can help significantly with the doctoral attrition problem mentioned above. For students not continuing on to the PhD, a strong master's degree can be a very good 'off ramp' leading to a successful career, for example, in the corporate, government, or non-profit sectors.

First Open Forum for Graduate Faculty

Following the post on professionally oriented master's programs, we organized an open forum for graduate faculty members to discuss in person the opportunities and next steps for the development of new programs. The forum was also intended as an opportunity for us to hear about any issues connected with the subject. I invited Provost Joseph Alutto to give the opening remarks. In those remarks, the provost expressed the Office of Academic Affairs' support for the initiative, and he described his own experiences with professional master's degrees from his time as Dean of Ohio State's Fisher College of Business. In addition, I invited Steve Mangum, Senior Associate Dean of Fisher College and Craig Davis, a senior faculty member from the School of Environment and Natural Resources, to talk about their experiences with initiating and continuing professional master's programs in their colleges.

More than 60 faculty members from 35 graduate programs, 15 colleges, and several administrative areas attended and participated in this first forum. There was a lively discussion about opportunities and issues for developing new programs, and we judged the event to be a very successful first start. Subsequently, two smaller forums were held to discuss the development of new programs at a more detailed level and to assist the people working on these ideas.

Posting on the Future of Doctoral Education

I believe that the third major post was the most important because it addressed fundamental questions about the PhD, the degree that in essence defines a research university. It is also the most challenging subject we, as members of the graduate community, face because of the historical factors that have shaped our approach to doctoral education, because of the great range and diversity of disciplines—each with their distinctive culture—that offer the doctoral degree, and because

of the multiple challenges and questions about the best way to prepare doctoral students for their careers in the 21st century.

On this topic, probably more than for any other, I started from the premise that the most important task was to identify the right questions to ask programs as they considered their future plans. The questions we chose were:

- What are the goals for doctoral education and doctoral programs at Ohio State for the 21st century?
 - What techniques and methodologies appropriate for 21st century work should our students learn?
 - How can we help them acquire the appropriate intellectual and research breadth to address important topics and problems for the 21st century?
 - What career paths do our PhD graduates follow?
- How should we best prepare students for future academic careers?
- How should we best prepare students for careers in government, business, non-profits, etc.?
- How many doctoral students should we be enrolling, on a program-by-program basis?

We recognized that these were not easy questions. Indeed, they go to the heart of doctoral education and doctoral programs. But they are the important ones to consider in the context of the current challenges facing research universities. My post went on to provide some background and context for these questions and to provide links to relevant articles on this topic that have appeared over the last two years.

Second Open Forum for Graduate Faculty

We knew from the outset the need for having a faculty forum on doctoral education because of its core importance to the university. This forum attracted more than 60 faculty members and administrators from across campus, and we were also able to connect by video to faculty at the Ohio State Mansfield campus. Provost Alutto again provided the opening remarks and endorsed the importance of the subject and of the dialog with faculty as the graduate programs began to address the questions posed on the blog. I followed the provost's remarks with a brief summary of the main points outlined in the post,

and then I moderated the wide-ranging discussion that followed. This forum was timely in that it came at the end of the academic year and provided a natural occasion to begin thinking about the future.

Comments

I believe that overall the effort to communicate directly with faculty has been successful to date. The indicators we have are the number of people reading and responding to the postings, the good attendance at the faculty forums, and unsolicited comments provided by people I run into across campus. One lesson we have learned and will apply for the next posting is to not include the entire text in the direct email to faculty, but rather an introductory paragraph followed by a link to the blog posting. We understand that people tend not to read long email messages and that it is better to direct them to the blog, which has a more readable format.

The important metric in the end will be success in stimulating the development of new graduate programs and the revision or redirection of existing ones to respond to the main questions about the future of graduate education. I remain optimistic about achieving good outcomes but recognize that there will be significant challenges along the way and that continuing efforts in working with the colleges and departments will be required.

I hope this information is helpful to the CGS community and welcome comments and questions in the spirit of sharing experiences about best practices that makes CGS such a successful organization.

Acknowledgements

I am pleased to acknowledge the important contributions of Assistant Dean Kathleen Wallace, who leads our communications activities in the graduate school, including setting up and managing the blog and related activities. She also led the redesign of our web site last year. I also acknowledge the valuable contributions of all the staff in the graduate school who participated in the effort.

By Patrick S. Osmer, Vice Provost for Graduate Education and Dean of the Graduate School, The Ohio State University

Welcome New Regular Institutional Members

Corcoran College of Art and Design

Missouri Western State University

Park University

Thompson Rivers University

University of California, Merced

University of North Florida

Data Sources: Graduate Students with Disabilities

According to data from the American Community Survey, about 6% of the US population ages 5 to 20 and 13% of the US population ages 21 to 64 had a disability in 2007 (US Census Bureau, 2011a and 2011b). Data on the participation of individuals with disabilities in graduate education is not as widely disseminated as data on graduate enrollment by other student characteristics, such as gender, citizenship, and race/ethnicity, but some data do exist to shed light on this topic.

One somewhat unlikely source of information on graduate students with disabilities is the National Postsecondary Student Aid Study (NPSAS). The main purpose of the NPSAS is to examine how students finance their education, but the survey data can also provide estimates of graduate enrollment by student characteristics, including disability status. The NPSAS defines a disability as a condition such as blindness; deafness; severe vision or hearing impairment; substantial limitation of one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying; or any other physical, mental, emotional, or learning condition that lasts six months or more.

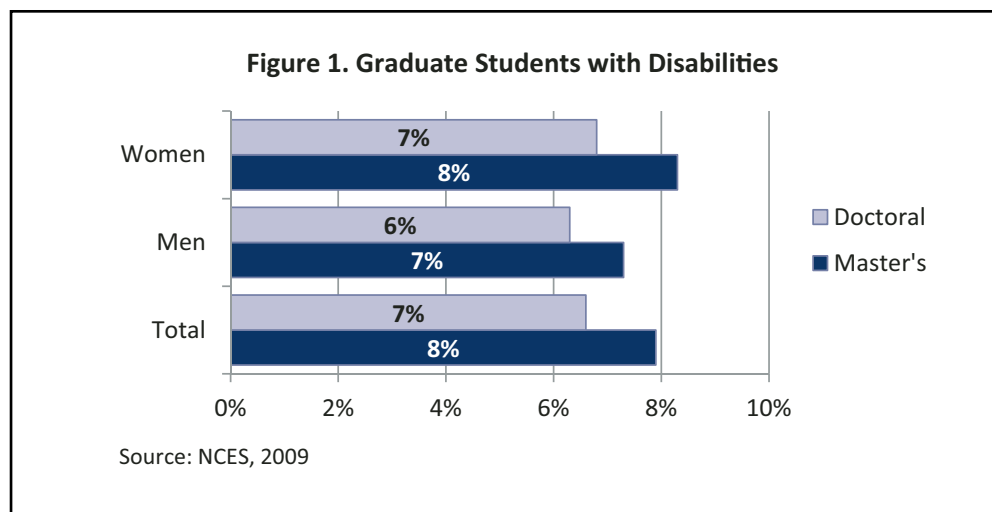
According to data from the most recent NPSAS, about 8% of master's students and 7% of doctoral students in academic year 2007-08 had some type of disability (NCES, 2009). At both the master's and doctoral levels in 2007-08, women were slightly more likely than men to report having a disability—8% vs. 7% at the master's level and 7% vs. 6% at the doctoral level, as shown in Figure 1.

The NPSAS data also show that the percentage of graduate students who reported having some type of disability in academic year 2007-08 varied by broad field. At the master's level, students enrolled in mathematics, engineering, and computer science were least likely to report having a disability (4%), while master's students in the broad fields of health and education were most likely to report having a disability (both 10%), as shown in Figure 2. At the doctoral level, 5% of students in the broad fields of health and

humanities reported having some type of disability, compared with 9% of doctoral students in social and behavioral sciences. Data for business/management at the doctoral level were suppressed due to the small sample size.

In addition to showing the percentage of students with a disability by broad field, the NPSAS data also illustrate the distribution of students with and without disabilities across broad fields. In most cases, the distributions were very similar in 2007-08, with students with and without disabilities being distributed in similar shares across most broad fields of study. For example, at the master's level, 8% of all students with disabilities and 7% of all students without disabilities were enrolled in social and behavioral sciences. Similarly, 14% of all doctoral students with disabilities, as well as 14% of all doctoral students without disabilities, were enrolled in life sciences. But, there were some cases in which the distributions varied. At the master's level, students with disabilities were more likely to be in education than their counterparts without disabilities; 35% of all master's students with disabilities were enrolled in education in 2007-08 compared with 29% of all master's students without disabilities. In contrast, master's students with disabilities were less likely to be in business/management than students without disabilities (18% vs. 25%). At the doctoral level, students with disabilities were more likely to be enrolled in social and behavioral sciences than students without disabilities (19% vs. 13%).

A second source of data on graduate students with disabilities is the annual *Survey of Earned Doctorates* (SED), which is administered to recipients of research doctorates in the United States. In its definition of disability, the SED includes blindness/visual impairment, physical/orthopedic disability, deafness/hard of hearing, learning/cognitive disability, vocal/speech disability, and other/unspecified disabilities. According to the SED, 1.5% of all doctorate recipients in 2009 reported having one or more disabilities of any type (National Science Foundation, 2010). This



percentage is considerably lower than the NPSAS estimate of the percentage of doctoral enrollees with disabilities, but it is important to note that the populations and methodologies of the two surveys are very different, which might explain the difference between the two figures. First, the SED only collects data on recipients of research doctorates, while the NPSAS includes in its estimate students enrolled in all doctoral programs, including practice-oriented programs such as the PsyD, DPT and EdD. In addition, the response rate for the SED is typically in the 90-95% range each year, while the NPSAS is a sample survey based on a much smaller subset of doctoral students and therefore is subject to sampling errors. Finally, the SED reports data on doctorate recipients while the NPSAS surveys doctoral enrollees. While it is possible that there are differences in completion rates between students with and without disabilities which could result in students with disabilities comprising a higher share of enrollees than degree recipients, the available datasets are unable to indicate whether this is the case.

The SED provides disaggregated data by field of study and student demographics. By broad field of study, the percentage of doctorate recipients with one or more disabilities of any type ranged from a low of 0.7% in engineering to a high of 2.6% in education. By gender, 1.3% of male doctorate recipients and 1.6% of female doctorate recipients reported a disability. And by citizenship, US citizen and permanent resident doctorate recipients were more likely than temporary visa holders to report having a disability—2.1% vs. 0.4%.

The National Science Foundation also publishes the most accessible, albeit somewhat narrowly focused, source of data on individuals with disabilities, *Women, Minorities, and Persons with Disabilities in Science and Engineering* (National Science Foundation, 2011). This online data compendium is updated biennially and includes data tables on scientists and engineers with disabilities and graduate students in science

and engineering with disabilities, relying on the SED and the NPSAS as data sources. While the data tables focus only on science and engineering, they provide more detailed data on disabilities than other reports based on the SED and do so in a more user-friendly format than the NPSAS.

Although the figures vary between the two sources, the SED and the NPSAS provide some information on the participation of students with disabilities in graduate education. Regardless of the data source, the scope of that participation highlights the importance of addressing the varied and unique barriers that students with disabilities face in their pathways to and through graduate school.

By Nathan E. Bell, Director, Research and Policy Analysis

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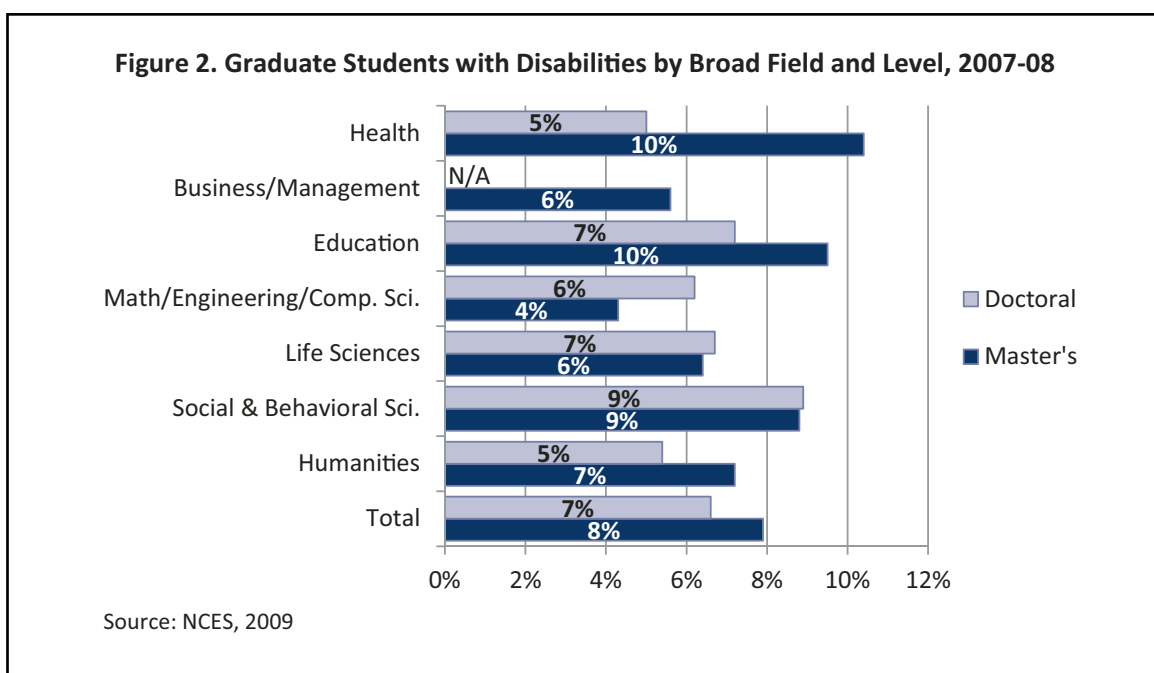
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Pathways through Graduate School and into Careers

In 2009, the Council of Graduate Schools (CGS) and the Educational Testing Service (ETS) developed a joint study project to examine challenges facing graduate education in the United States. The two organizations convened a 19-member commission of university presidents, deans, research scientists, provosts, measurement experts and industry leaders to oversee the study. The effort culminated in a report, *The Path Forward: The Future of Graduate Education in the United States*. This report argued that the nation's future prosperity and ability to compete in the global marketplace depends on producing the appropriate number of graduate degree holders prepared to address the challenges and opportunities of the 21st century. The report provided recommendations for policy makers, industry, and universities. The impact of the *Path Forward* report was extensive and influenced federal policy as well as policies and practices of higher education leaders in discussing the role and importance of graduate education with a variety of audiences ranging from university trustees to faculty.

One major need identified in the report was that of understanding the pathways through graduate school and into the world of professional occupations. The *Path Forward* report noted the importance of providing career path transparency for graduate students and especially for doctoral students as the expected career pathways for them may be less straightforward than in the past. Factors contributing to this situation include changes in the composition of the higher education instructional workforce, increased time to complete the degree, and the length of time for postdoctoral research necessary to secure a faculty position in some fields. A third factor is the difficulty of guiding students along the pathway that leads to jobs in government, industry, and non-profit institutions by faculty who may not understand the path themselves. These factors and others all point to the need to clarify the path and expand the search for career options for doctoral students and ensure transparency for career outcomes for applicants to graduate school. The *Path Forward* report specifically recommended that universities provide appropriate training, mentoring, and information about career opportunities outside of the academy to help more students understand the career options available to them and to select graduate programs that will prepare them for their chosen career goals.

To address the important issue of graduate education and careers, CGS and ETS have joined together again to undertake a new research effort that will address several topics. These include understanding graduate students' knowledge of career options, how students learn about occupational opportunities, and the role of graduate programs and graduate faculty in informing and guiding students. The research effort will also explore the career pathways that individuals with graduate degrees follow as well as employer expectations of graduate degree holders.

This new research effort "Pathways through Graduate School and into Careers: The Essential Role of Graduate

Education" will be guided by a commission consisting of industry leaders, university presidents, graduate deans and provosts. The commission is currently in the process of being formed and its role is two-fold. It will oversee and guide the research effort that will be undertaken by staff at ETS and CGS, as well as help create a national conversation about why understanding the pathways through graduate school and into careers is important.

The result of this research effort and the commission's work will be a report that will focus on:

- The gap in knowledge related to graduate education and careers.
- Graduate students' career aspirations.
- The role of graduate schools in meeting graduate students' career aspirations.
- Employers' needs, wants and expectations of graduate degree holders.
- Current public policies and programs that encourage or discourage graduate student career success.
- Recommendations for universities, employers and policy makers.

The commission's report and related materials are scheduled to be released in April 2012 at the annual CGS legislative conference in Washington, DC.

This new project comes at a particularly important time as policy makers are increasingly focused on examining the value and return on both state and federal investments in higher education. While the role of higher education and graduate education has never been more important to the country's future, it is increasingly under the microscope and under pressure to demonstrate value and outcomes. Examples of this include the recent promulgation of new federal rules from the US Department of Education on gainful employment and by Congressional interest in the transparency and accuracy of post-graduate employment and salary information reported by law schools and made available to potential law students.

The "Pathways through Graduate School and into Careers" project will provide leaders in higher education, business and government with solid research findings and recommendations designed to enhance the graduate education enterprise and its central role in preparing the future innovators, experts and leaders the country needs to be successful in the global economy.

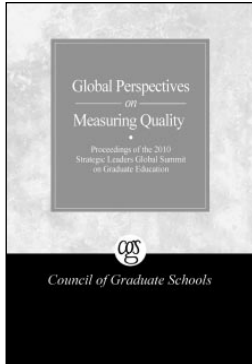
CGS plans to provide regular updates on the commission's work to the membership through a variety of formats including presentations at meetings, updates on the CGS website and webinars as appropriate.

Contact: Patricia McAllister



CURRENT PUBLICATIONS

from the *Council of Graduate Schools*

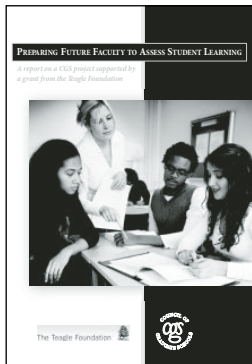


GLOBAL PERSPECTIVES ON MEASURING QUALITY (2011)

The 2010 Strategic Leaders Global Summit was held in Brisbane, Australia, and addressed the challenging topic of measuring quality in graduate education. Representing the contributions of graduate education leaders in 17 countries, these proceedings highlight a variety of emerging best practices for program and institutional assessment. Special attention is given to communicating with campus stakeholders and planning assessment-based interventions in the areas of mentoring, research training, and professional development for graduate students.

ITEM NUMBER: GPMQ | MEMBER PRICE: \$35 | NON-MEMBER PRICE: \$40

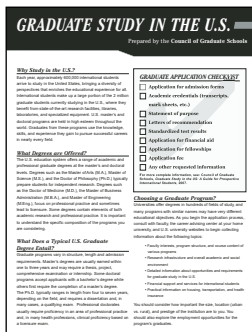
*Bulk pricing available to members only



PREPARING FUTURE FACULTY TO ASSESS STUDENT LEARNING (2011)

Quality and accountability in US higher education depend on thoughtful assessments of undergraduate student learning. Faculty are expected to use assessment methods that enhance teaching and learning, yet few graduate students receive formal preparation in this area. With funding from the Teagle Foundation, CGS developed a project to explore the potential of Preparing Future Faculty (PFF) and similar programs to fill this gap. This report provides data and insights gleaned from assessment experts, graduate deans, and graduate students about opportunities to integrate preparation in learning assessment into professional development programs for graduate students.

ITEM NUMBER: PFFSL | MEMBER PRICE: \$15 | NON-MEMBER PRICE: \$18 *Bulk pricing available to members only



GRADUATE STUDY IN THE US FLYER (2011)

Each year, approximately 600,000 international students arrive to study in the United States, bringing a diversity of perspectives that enriches the educational experience for all. This flyer provides practical advice for international students considering applying to graduate school in the US. It includes basic information about academic and professional degree types, the typical requirements and structure of US master's and PhD programs, preparing for graduate study, obtaining student visas, and selecting and applying to graduate programs. It contains information about the various types of financial support eligible to international students and general recommendations for preparing a successful application. The flyer also includes a graduate application checklist.

ITEM NUMBER: GSUSFLYER | MEMBER AND NON-MEMBER PRICE: \$1 *AS LOW AS \$.25 PER COPY FOR BULK ORDERS

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Open Doors with a Doctorate (2009)

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The 2011 theme is:
“Inclusiveness, Innovation and Excellence:
Creating the Future for Graduate Education”

Registration begins August 2011.

Communicator

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