The importance of collecting PhD career pathways data has been well documented in recent years (Allum, Kent, & McCarthy, 2014; National Academies, 2012). Among the CGS membership, sessions on this topic have been held at CGS Summer Workshops and Annual Meetings, and every year more voices join the chorus of deans seeking guidance on how to capture these data and use them effectively. The broader higher education community, including professional associations, has demonstrated strong interest as well. The National Science Foundation’s Early Career Doctoral Survey, the American Academy of Arts and Sciences’ Humanities Indicators project, and the American Chemical Society’s report, Advancing Graduate Education in the Chemical Sciences (2012) are just a few examples of other efforts that have made important headway in addressing the need for collecting and utilizing PhD career pathways information for various purposes.

However, there is still a need for better PhD career pathways data beyond these communities. We need to communicate the value of graduate education—and doctoral education in particular—to those “beyond the echo chamber,” to paraphrase Janet Napolitano’s CGS Annual Meeting presentation last December. Faculty careers can be immensely rewarding, and they play an essential role in our society. However, we know that PhDs thrive as intellectual leaders in other sectors of the workforce. Knowing where PhDs go and what they do is critical information for improving programs, since without this information it is impossible to know how well PhD preparation aligns with actual PhD careers. Better data on PhD careers at the institutional level would also help graduate deans advocate for the value of their doctoral programs by articulating the contributions that PhD graduates bring to sectors beyond academe.

As reported in the CGS’s most recent publication (Allum, Kent, & McCarthy, 2014), the dearth of PhD career pathways data can be largely attributed to a lack of standards, procedures, and resources for collecting and utilizing such information. The very task of finding contact information for PhD alumni can be a substantial barrier. It is also worth noting that the lack of PhD career pathways information may also stem from a lack of motivation from within the institution. CGS President Suzanne Ortega has posited two such examples: 1) current and former faculty’s desire to share their lifestyle with their students, and 2) the need to diversify the professorate. At a recent meeting of the National Academies, Dr. Ortega explained, “Those of us who have held faculty positions found great joy and fulfillment in those roles. It is only natural that we should wish to share that lifestyle with our students, about whom we care very much.” There are good intentions behind this attitude, particularly on the part of faculty who seek to encourage underrepresented minority students to pursue faculty careers. Yet there are also great risks in communicating to graduate students that the faculty path is the only one which can lead to fulfillment and joy.

In fact, we know anecdotally and through aggregate data that PhDs have always pursued a wide range of careers (see CGS, 2008). Between 1993 and 2013, the percentage of doctorate recipients with definite postgraduate US employment commitments has remained relatively steady at around 50%, although there have been some notable trends by field of study (National Science Foundation, 2013). CGS’s view is that it is now time to come to a better understanding of what those careers are, what they contribute to our society, and how considering the true outcomes of PhD alumni can help institutions improve their offerings to current students.

A New Project

In April, CGS announced a new planning project to continue its work to help institutions better understand their PhD graduates’ career pathways in STEM, humanities, and social science fields. Newly-awarded grants from the Alfred P. Sloan Foundation will support the project, which will include a three-phase approach to build a better understanding of PhD career pathways and outcomes. The project will involve collaboration with a wide range of stakeholders, including graduate students, faculty, and institutional administrators. CGS will work with institutions to develop and implement strategies for collecting and utilizing PhD career pathways data, with the goal of improving graduate education programs and enhancing the value of a PhD degree.
Foundation and The Andrew W. Mellon Foundation will support this new project. The 2014 CGS feasibility study on PhD career pathways—also funded by the Mellon and Sloan Foundations—found a clear need for national standards for PhD career pathways data collection and use, and addressing this need will be the primary goal of the current project. The project will run through December 2015.

During this time, CGS will develop a survey instrument and framework document designed to help universities gather and utilize long-term career information from their PhD students and alumni with the goal of improving PhD programs. The hope is that empowering institutions to collect these data individually would also enable the creation of a national, uniform dataset on PhD career pathways. Specifically, this project will develop:

- a survey instrument of 15-20 core questions intended to collect baseline PhD career pathways data from current students and alumni up to 15 years post-graduation (institutions will be able to append additional questions if they would like), and
- a framework document that provides principles and guidelines regarding the collection and utilization of PhD career pathways data, including recommendations for integrating data collection and use into everyday university processes.

A project advisory committee will advise CGS staff in the development of these two documents. The advisory committee, which will include graduate deans, researchers, and representatives of higher education associations and disciplinary societies, will conduct virtual meetings throughout the month of June. Cognitive interviews will be conducted with a small number of PhD students at Washington, DC-area universities to refine the instrument further.

**Stakeholder Workshops**

In order to gather a diverse range of perspectives and ensure that the survey instrument and framework document are maximally useful, CGS will convene two small stakeholder workshops early in the project. The first, held in May, brought together representatives of federal agencies, higher education associations, and disciplinary societies. This workshop featured a panel of high-profile speakers, including William (Bro) Adams, Chair of the National Endowment for the Humanities (NEH); Peter McPherson, President of the Association of Public and Land-Grant Universities (APLU); and Sally Rockey, Deputy Director for Extramural Research and Director of the Office of Extramural Research, National Institutes of Health (NIH). Each panelist was invited to speak about the pressing data needs of their respective organizations, and how better PhD career pathways data could promote program improvement. This panel was followed by presentations by other non-university higher education leaders, and a rich conversation about the types of data that might support the work that their organizations do.

The second workshop, to be held in June, will gather graduate deans and their provosts or other senior academic leaders. Institutional pairs representing a range of institutional types and experience collecting PhD career pathways data have been invited to participate. Joint presentations by deans and their provosts will address potential challenges in collecting and using PhD career pathways data and integrating these processes into everyday university business.

Both stakeholder workshops will provide valuable information that will be referenced throughout the process of developing the survey instrument and framework document, both of which will be released in December 2015.

**Next Steps**

This planning project is Phase I of a larger effort to help universities collect standardized, program-level PhD career pathways information. We anticipate that Phase II of the project will involve a pilot of the survey instrument and framework document. To ensure that the final instrument addresses the needs and concerns of a broad range of member institutions, we will continue to listen to as many voices as possible as we move forward.

Contacts: Jeff Allum, Julia Kent, Maureen McCarthy

**References**


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**DID YOU KNOW?**

Did you know that since the 1970s, medicine and computers have reigned over patents like no two categories have dominated any previous period of invention in US history? "From Atoms to Bits": A Brilliant Visual History of American Ideas
Data Sources: New Insights in Master’s Education

Master’s education is a large component of the graduate education enterprise. According to the CGS/GRE Survey of Graduate Enrollment & Degrees (Allum, 2014), two-thirds (67%) of all graduate applications to US institutions for Fall 2013 were to master’s and other programs. Master’s and other programs constitute 83% of first-time graduate enrollment and 73% of total enrollment at US institutions in Fall 2013. More than four-in-five (83%) graduate degrees awarded in academic year 2012-13 were master’s degrees. Master’s enrollment is particularly large in the broad fields of business, education, engineering, health sciences, and mathematics and computer sciences.

Similarly, international graduate students are becoming an increasingly large component of the student body at US institutions (Allum, 2014; Farrugia & Bhandari, 2014). Although there have been some changes in international graduate student enrollment by country of origin, international students constituted 20% of all first-time graduate enrollment and 17% of all graduate enrollment in Fall 2013 (Allum, 2013). As recently as the period between Fall 2012 and Fall 2013, first-time enrollment among international graduate students increased 11.5%.

Until now, however, there has been no comprehensive, national dataset capable of describing applications and enrollments of master’s students by citizenship. The CGS International Graduate Admissions Survey began collecting data on applications, offers of admission, and enrollment by citizenship and degree-objective earlier this year, and the results reveal new insight into the size and scope of master’s education.

The 2015 CGS International Graduate Admissions Survey, Phase I: Preliminary Applications was sent to 793 institutions of higher education in the United States, 501 of which were members of the CGS as of January 2015, and 292 of which were not CGS members but were members of the Conference of Southern Graduate Schools (CSGS), the Midwestern Association of Graduate Schools (MAGS), the Northeastern Association of Graduate Schools (NAGS), and the Western Association of Graduate Schools (WAGS). A total of 377 institutions responded to the survey for a 48% response rate.

Overall, institutions responding to the survey conferred 81,214, or 70% of the approximately 115,315 graduate degrees awarded to international students in the US in 2012-13 as derived from the Integrated Postsecondary Education Data System (IPEDS).

Almost two-thirds (62%) of all graduate applications from prospective international graduate students for Fall 2015 were for master’s and certificate programs, while slightly more than one-third (38%) were for doctoral programs. The proportion of graduate applications in master’s and certificate programs is similar to, although smaller than, the proportion reported by the CGS/GRE Survey of Graduate Enrollment & Degrees (Allum, 2014), suggesting the possibility that international students apply to master’s and certificate programs in slightly smaller numbers than US citizens and permanent residents.

Respondents to the 2015 CGS International Graduate Admissions Survey, Phase I: Preliminary Applications report that the fields of engineering and mathematics & computer sciences constitute one-half (50%) of all applications from prospective international students for Fall 2015, and 71% of those are for master’s and certificate programs (see Figure 1). Four of five (81%) applications to prospective international graduate students in the field of business, the third largest field of study among prospective international graduate students, are for master’s and certificate programs. Applications to master’s and certificate programs constitute a comparatively small percentage of applications in physical & earth sciences, biological & earth sciences, and social & behavioral sciences.

More than two-thirds (68%) of applications from prospective international graduate students to US institutions were from China and India (see Figure 2). Sixty-four percent of applications from China and 84% of applications from India were for master’s and certificate programs. Applications from prospective graduate students from South Korea, the third largest sending country, were comparatively small, and 30% of those were for master’s and certificate programs. Slightly more than one-half (52%) of applications from prospective students from Taiwan, the fourth largest sending country, were for master’s and certificate programs, and 60% of applications from prospective students from Saudi Arabia, the fifth largest sending country, were for master’s and certificate programs.

Figure 1: Distribution of International Graduate Applications by Degree Objective and Broad Field, Fall 2015

![Figure 1: Distribution of International Graduate Applications by Degree Objective and Broad Field, Fall 2015](image)
International students constitute a large component of master’s education. In the coming years, as institutions continue to contribute to the CGS International Graduate Admissions Survey, patterns will likely emerge reflecting the extent to which international master’s students from various countries and nations choose to apply to and enroll in U.S. graduate programs. Data generated by the 2015 survey suggests that international master’s student enrollment is highly concentrated in two fields of study, engineering and mathematics & computer sciences, and among students from two countries, China and India. Future iterations of the survey will contribute to the establishment of trends over time.

By Jeff Allum, Director, Research & Policy Analysis

References


New Members

Regular:
Ashford University
Merrimack College

CGS Board Nominations Sought

Nominations are being accepted for election to the CGS Board of Directors. If you are interested in serving on the Board, or if you would like to nominate a colleague, please send a CV to the attention of:

James C. Wimbush
Chair, CGS Nominating Committee
c/o Anna M. Naranjo
anaranjo@cgs.nche.edu

Subscribe to the New and Improved Dean's Discussion Board

Are you a graduate education leader at a CGS-member institution? We invite you to subscribe to the Dean's Discussion Board—an electronic forum where graduate deans and other senior staff exchange questions, ideas and institutional practices. Recent enhancements provide the option to reply to discussion board messages directly by email.

Common topics include financial aid, admissions, joint and dual degree programs, and administrative policies, among many others. Examples of recent posts:

• “Does your institution require that faculty submit a midterm grade or feedback for students in graduate classes? Is there another form of formalized midterm feedback that is typically used?”
• “Do your diplomas list only the Graduate School as awarding the degree, or do they list the specific college in which most of the work was done, or both?”
• “How far in advance of the fall term does your institution hold its new graduate student orientation?”

To request access, email forum@cgs.nche.edu with your name, job title, institution, and email address. Representatives of member institutions may view and post comments. Corresponding Affiliates and Sustaining Members at the Champion, Collaborator, and Visionary levels are eligible for read-only access.

Read more about the discussion board here.
New Deans and Titles

DeBrenna Agbényiga is the Vice Provost and Dean, Graduate School at the University of Texas at San Antonio. She replaces Dorothy Flannagan.

Suzanne Barbour begins her appointment on July 13, 2015 as the Dean of the Graduate School at the University of Georgia. She replaces Julie Coffield.

Fiona Doyle is the Dean of the Graduate Division at the University of California, Berkeley.

Heather Frederick is Dean of the Graduate School at Northcentral University.

Kevin Gibson is the Interim Dean of the Graduate School at Marquette University.

Ryan Hendrickson will serve as Interim Dean of the Graduate School, Research and International Programs at Eastern Illinois University beginning July 1, 2015. He replaces Robert Augustine.

James Herbert is the inaugural Dean of the Graduate College of Drexel University. His appointment is effective August 1, 2015.

Jonathan Kaplan is the Interim President of Walden University. He replaces Cynthia Baum.

Brad Korbesmeyer was named Interim Dean of Graduate Studies at State University of New York at Oswego. He replaces David King.

James T. LaPlant is the Interim Dean of the Graduate School at Valdosta State University. He replaces Alfred Fuciarelli.

Yueh-Ting Lee will become Dean, Graduate School at Southern Illinois University Carbondale effective July 9, 2015. He will replace James Garvey.

Patricia Mooney-Melvin, as of July 1, 2015, will serve as Interim Dean of the Graduate School at Loyola University of Chicago. Samuel Attoh, the former graduate dean, will serve as Loyola’s Interim Provost.

Linda Petrosino is the Interim Provost and Vice President for Educational Affairs of Ithaca College.

Scott Pratt is the Dean of the Graduate School of the University of Oregon. He replaces Andrew Berglund.

Heather Swicker will begin her term as Dean of the Faculty of Graduate Studies and Research at the University of Alberta on July 1, 2015. She replaces Mazi Shirvani.

Paula Traktman, effective July 1, 2015, will become the Dean of Graduate Studies at the Medical University of South Carolina. She will replace Jacqueline McGinty.

Costas Tsatsoulis is the Interim Dean, Toulouse Graduate School of the University of North Texas. He replaces Mark Wardell.

Shirley Williams-Kirksey is the Dean of Graduate Studies at Clark Atlanta University. She replaces Bettye Clark.

Nominations Now Open for Dissertation Awards

CGS is now accepting nominations for this year’s CGS/ProQuest Distinguished Dissertation Award. Two awards will be presented at the Annual Meeting in Seattle, Washington on December 3, 2015. The winners will receive $2000 plus travel expenses to the meeting and will be invited to speak at the Awards Luncheon.

Competition fields for 2015 are 1) Biological and Life Science and 2) Humanities/Fine Arts. Each CGS regular or associate member institution may nominate one individual in each of the fields. Nominations must be received by July 17, 2015.

Full details and requirements for the nomination package can be found on the CGS website at www.cgsnet.org/cgsproquest-distinguished-dissertation-award. Questions should be addressed to Cheryl Flagg at cflagg@cgs.nche.edu.