

Closing Gaps in our Knowledge of PhD Career Pathways: Preparing Future Faculty for All Types of Colleges and Universities

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According to the National Science Foundation's (NSF) National Survey of College Graduates, 49% of doctoral degree holders employed in 2015 worked for colleges and universities in some capacity. For over two-thirds of the PhDs employed by colleges and universities, teaching is their primary or secondary work activity. In fact, 43.8% of the postsecondary teaching workforce, including those employed at community colleges, hold a doctoral degree (U.S. Bureau of Labor Statistics, 2018). Though the vast majority of research doctorates are conferred by Doctoral Universities, these institutions only make up 7.1% (311 of 4,360) of degree-granting postsecondary institutions in the United States (National Center for Education Statistics [NCES], 2018a) and enroll just over one-quarter of the approximately 20 million undergraduate students (NCES, 2018b). Using survey data from the Council of Graduate Schools' (CGS) PhD Career Pathways project, this brief provides new insight into how PhDs feel about their preparation to work at different types of institutions.

Key Findings:

- The vast majority of PhDs in this study who worked in non-research universities viewed teaching as their primary responsibility. A large share of PhDs working for "Research Universities" identified basic research as their primary responsibility; however, the majority (55%) also considered teaching as either an important primary or secondary responsibility. (Figure 1)
- Across the sixteen skills measured in the survey, there were variations in the perceived importance by institutional sector. Those working at "Research Universities" placed higher importance on the traits of innovation, analytical thinking, persistence, and initiative compared to those with teaching as their secondary responsibility. In contrast, dependability, concern for others, and social orientation were all perceived as more important for those working in other postsecondary sectors outside of "Research Universities." (Figure 2)
- Doctorate holders in the study who were working at "Research Universities" overwhelmingly responded that their PhD prepared them well for their current job, regardless of work responsibility. When asked how well their PhD prepared them for their current job at "Research Universities," 83% of those with primary teaching responsibilities and 87% of those with secondary teaching responsibilities responded, "Extremely Well" or "Very Well." In contrast, just over half of respondents working for "Community or Two-year Colleges" answered "Extremely Well" or "Very Well" to the same question. (Figure 3)



Figure 1: Teaching Work Responsibility Across Postsecondary Sector

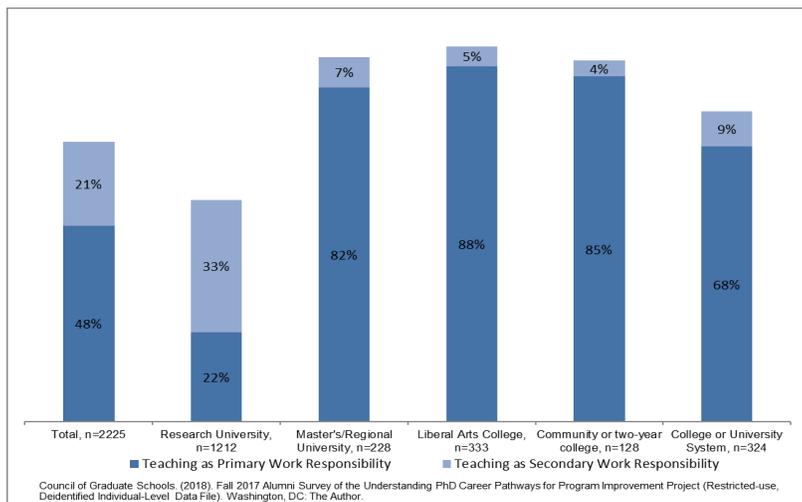


Figure 2: Percent responding "Extremely Important" or "Very Important" to survey item "How important are each of the following attributes/skills in successfully performing your work in this job?"

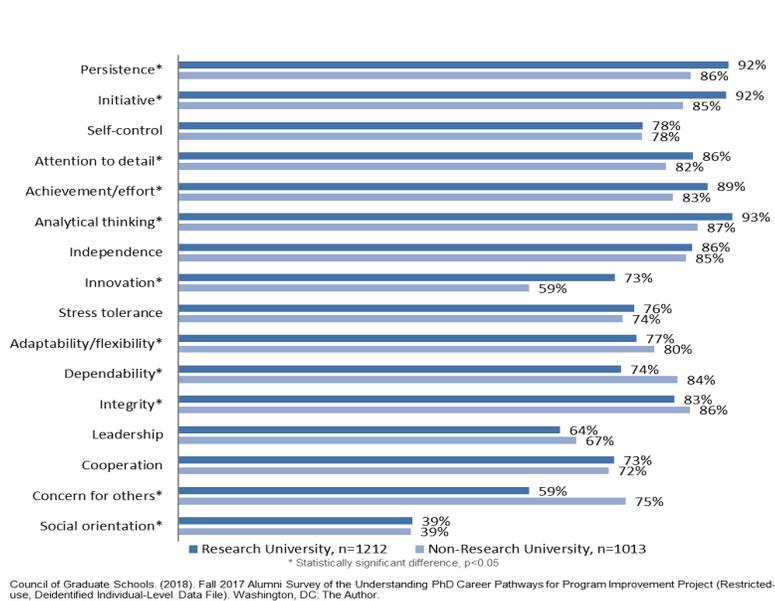
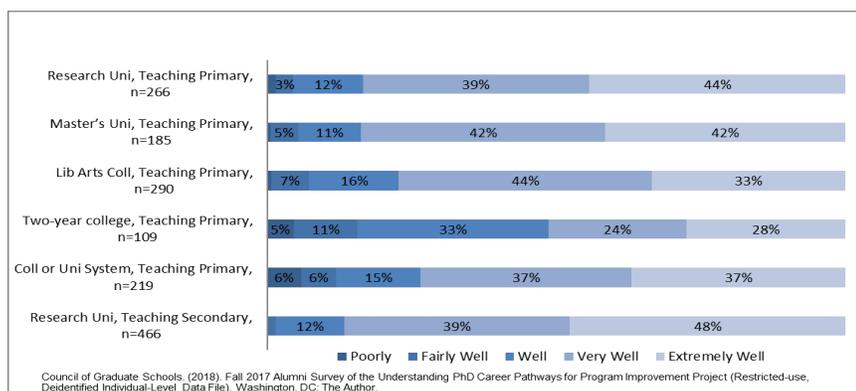


Figure 3: Percent responding "Extremely Well" or "Very Well" to survey item "How well did your PhD prepare you for [your current] job?" by Postsecondary Sector and Teaching Work Responsibility



Takeaway Points:

- PhDs work at many types of institutions. While research is identified as a primary or secondary responsibility by over 60 percent of respondents who worked at "Research Universities," overall, teaching was more likely to be identified as primary responsibility by PhDs working for colleges and universities across the spectrum of institutional types. This underscores the importance of offering PhDs opportunities to develop as teachers and educators.
- Perceptions of the importance of different work-related skills varied between those who identified teaching as a primary responsibility and those who identified research as their primary responsibility. While the finding seems to be consistent with the nature of the responsibilities, it also highlights the need to provide different types of opportunities to students seeking academic careers at different types of institutions.
- The findings point to potential opportunities for graduate schools and PhD programs to develop and offer resources and programming that prepare PhD students for careers in the "Community or Two-year College" sector.



Conversation Starters for PhD Program Improvement:

We encourage graduate schools to engage in campus conversations about humanities PhD careers to ensure that career diversity is seen and celebrated. Culture change happens incrementally and requires active participation of students, faculty, and employers. A good first step is understanding how your campus community communicates about career options for PhDs. Some of the questions that you may want to begin asking your campus colleagues (i.e., graduate school staff, college deans, graduate program directors, etc.) and others include:

- What kind of professional development opportunities does your institution provide your PhD students to hone their teaching skills? What institution-wide resources, as well as department/program specific resources are available for PhD students?
- How effective are these opportunities? What types of feedback processes and/or assessment plans for these professional development programs do your institution and PhD programs have?
- What are your institution and PhD programs doing to foster partnerships with area state colleges, community colleges, and other institutions to create teaching opportunities for PhD students aspiring to faculty careers?

Additional Resources:

There are several efforts that aim to help prepare graduate students for teaching careers. Launched in 1993 as a partnership between CGS and the Association of American Colleges and Universities, the Preparing Future Faculty (PFF) initiative has been a national movement to transform the way aspiring faculty members are prepared for their careers. PFF and other similar programs now provide doctoral students, as well as some master's and postdoctoral students, with opportunities to observe and experience faculty responsibilities at a variety of academic institutions with varying missions, diverse student bodies, and different expectations for faculty. The CIRTL Network at the Center for Integration of Research, Teaching, and Learning is another prominent example. The CIRTL, which was founded in 2003, uses graduate education as the leverage point to enhance excellence in undergraduate education. Other examples include, but are not limited to, the CUNY Humanities Teaching and Learning Alliance at the City University of New York's Graduate Center and Promise Maryland Alliance for Graduate Education and the Professoriate.

About the Data Source:

The CGS PhD Career Pathways Project Fall 2017 Alumni Survey was distributed to doctoral degree recipients that were three, eight, or fifteen years out of their PhD in selected programs at 35 participating institutions. Each of the universities administered the survey individually and shared the resulting data with CGS. This brief is based upon the restricted-use, deidentified individual-level data file, which includes 2,225 doctoral degree recipients who reported working for one of five postsecondary sectors (Research University, Master's/Region University, Liberal Arts College, Community or Two-Year College, and College or University System) in their current job and reported at least a primary work responsibility.

References:

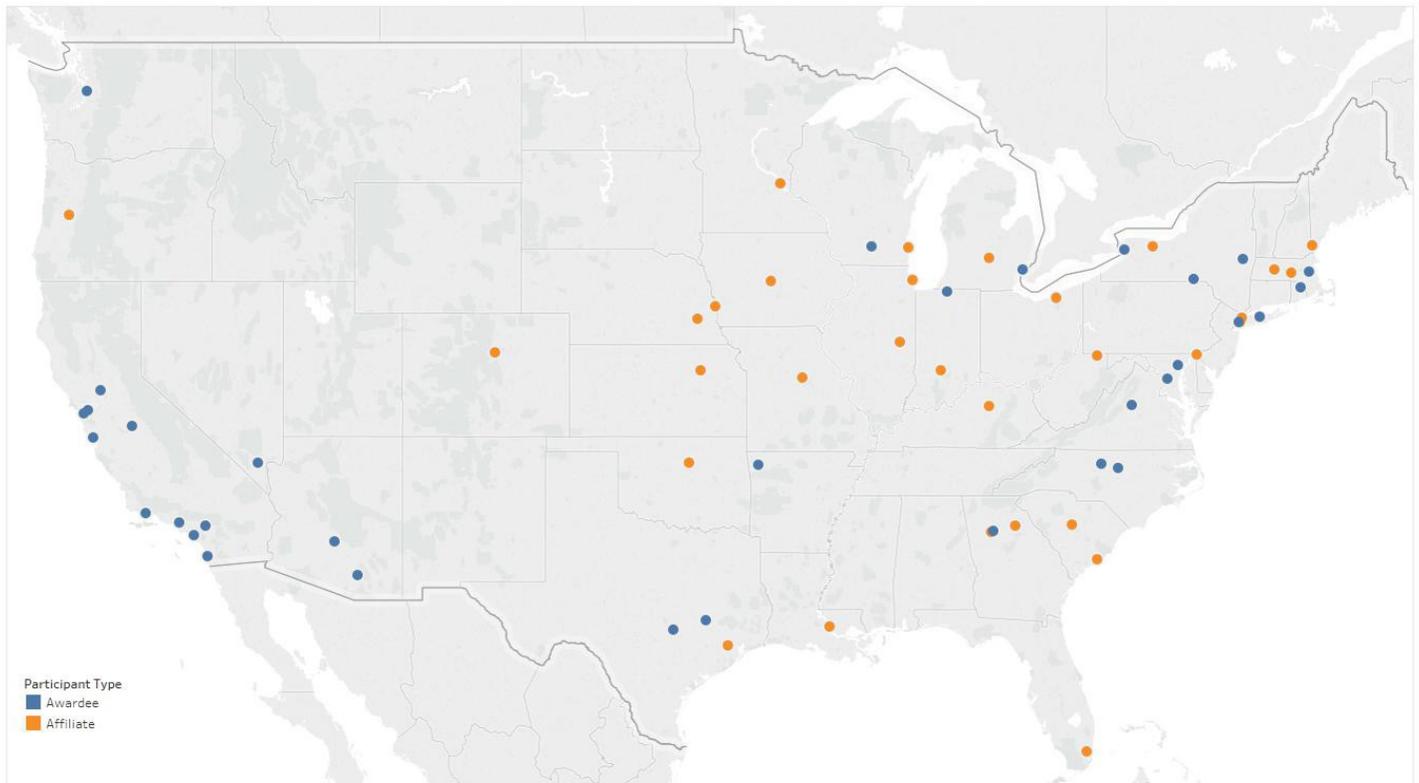
- Bureau of Labor Statistics. (2018). Educational attainment of workers 25 years and older by detailed occupation. Retrieved from <https://www.bls.gov/emp/tables/educational-attainment.htm>.
- National Center for Education Statistics. (2018a). Table 317.20. Degree-granting postsecondary institutions, by control and classification of institution and state or jurisdiction: 2016-17. Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_317.20.asp?current=yes.
- National Center for Education Statistics. (2018b). Table 317.40. Number of degree-granting postsecondary institutions and enrollment in these institutions, by enrollment size, control, and classification of institution: Fall 2016. Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_317.40.asp?current=yes.

The CGS PhD Career Pathways Coalition

CGS PhD Career Pathways is a coalition of 65 doctoral institutions working to better understand and support PhD careers across all broad fields of study. Over the course of the project, universities will continue collecting data from current PhD students and alumni using surveys that were developed by CGS in consultation with senior university leaders, funding agencies, disciplinary societies, researchers, and PhD students and alumni. The resulting data will allow universities to analyze PhD career preferences and outcomes at the program level and help faculty and university leaders strengthen career services, professional development opportunities, and mentoring.

About CGS

For over 50 years, the Council of Graduate Schools has been the only national organization dedicated solely to advancing master's and doctoral education and research. CGS members award 86.9% of all U.S. doctoral degrees and 59.8% of all U.S. master's degrees. CGS accomplishes its mission through advocacy, the development and dissemination of best practices, and innovative research.



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