Reporting post-graduation outcomes of doctoral students using NCSES/NSF data

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Statement by AAU Chief Academic Officers on Doctoral Education Data Transparency
Numerous high-level reports over the past two decades have identified ways to improve PhD education. One frequently identified barrier to improvement is the lack of transparent data on PhD programs. The Chief Academic Officers of the Association of American Universities call on all PhD granting universities and their respective PhD granting colleges, schools, and departments, to make a commitment to providing prospective and current students with easily accessible information. This should include data on matters such as student demographics, time to degree, financial support, and career paths and outcomes within and outside of academia. AAU institutions should commit to developing the infrastructure and institutional policies required to uniformly capture and make public such data.”
Why focus on PhD doctoral students with these data?
Agenda

• What are National Science Foundation’s restricted-use microdata files?

• How do I get a license to access the restricted-use data?

• What kinds of research questions on PhD doctoral students can I answer with these data?

• Example – time to degree
NSF/NCSES available surveys

• Survey of Earned Doctorates (SED)
  • All individuals receiving a research doctorate

• Survey of Doctorate Recipients (SDR)
  • Research doctorate in science, engineering, social sciences, or health field

• National Survey of College Graduates (NSCG)
  • College graduates with at least a bachelor’s degree

• National Survey of Recent College Graduates (NSRCG) (1973-2010)
  • Bachelor’s or master’s degree in science, engineering, or health field
Getting that restricted-use data!

Applying for a license
Steps to receive a license

1. Data Requirements and Research Plan
2. Security Plan
3. Signatures
4. Approval
You have the license. Now what?
Possible research topics

• PhD Doctoral student experience
  • Sources of financial support
  • Undergraduate and graduate educational debt
  • Time to degree

• Post-graduation outcomes
  • Work, other study or training within and outside of academia
  • Geographic location of employment or living
  • Primary and secondary work activities
  • Job satisfaction
  • Source and type of financial support for postdoctoral study or research

• Comparisons
  • Demographics, field of study, other institutions
Example: Time to degree
UC and comparator time to doctorate, 2016 graduating cohort

Median TTD by campus and discipline: All fields

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UC and comparator time to doctorate, 2016 graduating cohort

Median TTD by campus and discipline: Engineering/CS

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UC and comparator time to doctorate, 2016 graduating cohort

Median TTD by gender, campus, and discipline: Engineering/CS
UC and comparator time to doctorate, 2016 graduating cohort

Median TTD by race/ethnicity, campus and discipline: All fields
Highlights

• Gaining access may take time
• It’s free!
• Survey of Earned Doctorates and Survey of Doctorate Recipients are great sources for learning about who receives research doctoral degrees and post-graduation outcomes.
• Allows for comparisons based on demographics or with other institutions
What are some research topics that interest you?