



Career Tracking: Towards an European Career Tracking Platform

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How the Issue of Tracking Researchers' Careers is Addressed in the United States

National Center for Science and Engineering Statistics (NCSES) fulfills the legislative mandate of the National Science Foundation Act to provide a...

- *Central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources, and*
- *Source of information for policy formulation by other agencies of the Federal Government. . .*



NCSES Responsibilities

Statistical data on the following:

- The science and engineering workforce
- Research and development (R&D)
- U.S. competitiveness in science, engineering, technology, and R&D
- The condition and progress of Science, Technology, Engineering, and Mathematics (STEM) education in the United States



NCSSES Mission-Related Challenges

- Ensure inclusion of dynamic changes in the national research and education enterprise and its global context
- Encourage international and other national statistical agencies to collect data of comparable content and quality
- Develop indicators, new ways to obtain new types of data and innovative approaches to data collection that raise quality while making efficient use of resources
- Re-examine and improve the relevance, value and quality of data collected, data access, and data dissemination



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- One of 13 Primary Federal Statistical Agencies
- Activities are guided by

Office of Management and Budget's (OMB's) Standards and Guidelines for Statistical Surveys



OMB Standards and Guidelines for Statistical Surveys

1. Development of Concepts, Methods, and Design
2. Collection of Data
3. Processing and Editing of Data
4. Productions of Estimates and Projections
5. Data Analysis
6. Review Procedures
7. Dissemination of Information Products

OMB Standards and Guidelines for Statistical Surveys

Concepts, Methods and Design: Survey planning, new survey or major revision to existing survey

- Goals and objectives
- Consultation with potential users
- Decisions the survey will inform
- Key estimates
- Data tabulations and analytic results that will inform
- Related and previous surveys
- Steps taken to prevent unnecessary duplication
- Level of detail needed in disseminated data



New Surveys and Major Revisions to Existing Surveys

- Do we have the resources to
 - provide salient and relevant data to meet needs in a timely manner ?
 - measure change as often as needed ?
- How do we manage the different ways of maintaining, updating, accessing and retrieving data?
- Can we get buy-in on concepts and develop definitions that will ensure standardization?
- Will the resulting effort meet the “fitness of use” criteria?



NCSES Coverage of Doctorate Holders

	Doctoral degree from U.S. Institution	Doctoral degree from Institution Abroad
Residing in the U.S.	Survey of Earned Doctorates Survey of Doctorate Recipients (SDR)	Early Career Doctorates Project
	National Survey of College Graduates	
Residing Abroad	International SDR	No Data Collection

NCSSES Content about Degree Holders

How many individuals are in each stage?

Postsecondary enrollment data

What are their demographic characteristics?

What are the trends for each stage?

Workforce data

Postsecondary degree data

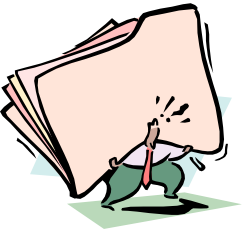
How does achievement in one stage relate to the other stages?



Policy-Related Requests for Data on Degree Holders

Pathways not pipelines

- Effectiveness of federal funding programs
- Certifications and certificates
- Work-life balance
- Household relationships
- Mobility patterns



Arsenal of Survey Research, Statistical and Operational Tools

- Site visits
- Literature reviews
- Administrative data reviews
- Cognitive interviews and focus groups
- Recordkeeping studies
- Workshops and outreach activities
- Quantitative studies/surveys
- Matching algorithms
- Quick turnaround surveys



How the Issue of Tracking Researchers' Careers is Addressed in the United States... Moving Forward

- Develop comprehensive, systematic approach
- Meet often with stakeholders
- Pilot early career doctorates survey
- Refine survey based on pilot results and launch full scale survey
- Define metrics for project success and measure them frequently