Defining, Counting and Understanding Faculty in the United States:

Strengths and Limitations of Current Higher Education Data

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Who are the faculty in the United States?

- The academic workforce: Teaching, research, and/or community outreach
- "It is essential to understand who they are; what they do; and whether, how, and why the nation's faculty are changing" (NSOPF, 1999)
- Three challenges to reaching this understanding using existing data:
 - Definitions
 - Coverage (institutional and individual)
 - Changing nature of faculty workforce

National Study of Postsecondary Faculty (NSOPF)

- Collected by National Center for Education Statistics (NCES) in
 - 1987-88
 - 1992–93
 - 1998–99 and
 - 2003–04



About NSOPF

- Purpose
 - Provide a national profile of part-time and full-time faculty and instructional staff working in public and private not-for-profit two-year and four-year institutions in the US
 - Data on faculty's backgrounds, responsibilities, workloads, salaries, benefits, and attitudes
- \circ Definition of faculty
 - Emphasis on instructional staff, regardless of faculty status
 - Inclusive of full-time and part-time instructors
 - NSOPF-88 limited to instructional faculty; later iterations expanded to include non-instructional faculty (researchers, administrators) and instructional staff without faculty status

NSOPF Challenges: Definitions and Coverage

- Accuracy in faculty counts provided in institutional questionnaire and in faculty lists
 - Across cycles, 18 58 percent of responding institutions had discrepancies of 10% or more between questionnaire and lists
- List data were used to stratify and sample faculty; In NSOPF-99, race/ethnicity and/or sex were missing for 35% of faculty on lists
- Differences between NSOPF and IPEDS definitions created challenges for count verification, weighting, etc.

NSOPF Challenges: Capturing Part-Time Faculty

- "Providing a complete and accurate list of part-time faculty is, for most institutions, the most difficult part of the NSOPF data request" (NCES, 2006)
 - Discrepancies between counts and lists higher among part-time faculty
- Contacting: 32% of part-time faculty required intensive training
- Survey completions: 11% lower among part-time faculty



Federal surveys that include faculty

Institutional level

 Integrated Postsecondary Education Data System (IPEDS)

Individual Level

- Survey of Doctorate Recipients (SDR)
- Early Career Doctorates Survey (ECDS)
- National Survey of College Graduates (NSCG)
- American Community Survey (ACS)

Current Population Survey (CPS)

IPEDS Definitions and Related Challenges

\circ Definitions of faculty

- Aligned with SOC Postsecondary Teachers: "Staff generally regarded by institutions as faculty are not only instructional staff, but can be research staff and public service staff as well"
- "Adjunct instructional staff": instructional staff paid on a course-by-course basis
 - Disconnected from part-time employment status and course loads; may be carrying fulltime equivalent course loads (or more)
- $_{\odot}\,$ Designations based on institutional definitions
 - Part-time or full-time
 - Faculty status

IPEDS Faculty Status

Instructional Staff

1% 600,000 500.000 23% 400,000 300,000 200,000 100,000 0 **Full Time** Part Time Without faculty status With faculty status



Research Staff

Public Service Staff



IPEDS Challenges: Coverage and Part-Time Faculty

- \circ Capturing research staff
 - Bergom and colleagues (2010) interviewed research faculty at 11 institutions; 5 of those did not report any research staff in IPEDS data
- Capturing part-time faculty
 - Institutions increasingly outsource some instruction; these instructors are not included in IPEDS (Powers, 2019)
 - Snapshot of part-time faculty in Fall may not reflect institutional usage across a 12-month period (Powers, 2019); No data on part-time non-tenure-track faculty hires (Jaquette & Curs, 2022)
 - Part-time faculty teaching at multiple institutions may be counted multiple times
 - Salary information is not captured for part-time faculty

Individual-level Surveys of Doctorates

- Survey of Doctorate Recipients (SDR)—NCSES
 - Survey of science and engineering doctorates from U.S. Institutions
 - Conducted every 2-years; new longitudinal panel
 - Includes items on rank, tenure, institution type, work activities, salary, hours
- Early Career Doctorates Survey (ECDS)—NCSES
 - Survey of doctorate (and equivalent) holders who earned degrees in the 10 years prior to the reference date
 - Two-stage sample of academic institutions with science, engineering or health master's or doctoral degrees
 - Included SDR items as well as items on work-life balance, mentoring, and benefits

ECDS and SDR Estimates of Faculty

					Faculty		
Surve	Selected y characteristic	All position types	All Faculty	Tenured faculty	Tenure- track faculty	Non-tenure track faculty with rank	Other faculty, no rank or tenure
2017							
ECDS 20	Population N	186,700	125,600	27,300	58,500	13,000	26,800
	Percent	na	100	21.7	46.6	10.4	21.3
	Median Salary	\$68,000	\$73,000	\$80,000	\$78,000	\$73,000	\$45,000
D							
2019	Population N	1,149,000	380,000	211,000	63,000	68,000	38,000
SDR 2	Percent	na	100	55.5	16.6	17.9	10.0
	Median Salary	\$118,000	\$95,000	\$109,000	\$84,000	\$82,000	\$60,000

Non-Federal Institution-Level Surveys and Challenges

- $_{\odot}\,$ Surveys of faculty compensation, benefits, and roles
 - AAUP's Faculty Compensation Survey (900 institutions; data on 370,000 fulltime and 90,000 part-time faculty)
 - CUPA-HR's Faculty Survey (1,300 institutions; data on more than 260,000 fulltime faculty)
- $_{\circ}$ Challenges
 - Population of interest varies (e.g., research faculty, community outreach faculty, postdoctoral scholars, primarily administrative faculty)
 - Two-year institutions underrepresented (12-14% of sample; 25% of institutions nationally)
 - Part-time faculty data lacking

Federal Individual-level Labor Market Surveys

- National Survey of College Graduates (NSCG)—NCSES
 - 92,537 individuals with a Bachelor's degree or higher in 2019
 - Education history, employment, occupation, industry
- American Community Survey (ACS)—Census
 - Annual 1% sample of the population
 - Asks about educational attainment, employment, occupation, industry
- Current Population Survey (CPS)—BLS
 - Monthly survey with rotation groups
 - Monthly topical modules focused on economic topics

Non-Federal Individual-level Surveys and Challenges

- $_{\odot}\,$ Regular surveys of faculty perspectives and behaviors
 - COACHE; Harvard University (2012-2017: 180 institutions, 43,000 faculty)
 - FSSE; Indiana University (2021: 75 four-year institutions, 9,000 faculty and GTAs)
 - HERI Faculty Survey; UCLA (2016: 157 institutions, 25,910 full-time undergraduate faculty)
 - CCFSSE; University of Texas Austin (2022: 105 institutions, ~10,000 faculty)
- $_{\circ}$ Challenges
 - Significant participation costs; institutional self-selection
 - Varying faculty populations of interest
 - Data is not publicly available

Challenges Across Data Sources

- Varying definitions of faculty and populations of interest make it difficult or impossible to compare data across sources
- Marginalized faculty (part-time, contingent, research, community outreach) generally under-represented
- Institution-level data cannot capture faculty perceptions and behaviors
- $_{\circ}$ Faculty-level data is dependent on the purpose of study and respondents

Takeaways and Next Steps

- Important to clearly define terms and classification criteria
- A comprehensive study of faculty requires both institution-level and facultylevel data
- The FACE Project (Faculty, Academic Careers, and Environments)
 - Developing proof of concept and infrastructure for a nationally representative survey of faculty
 - Conducting focus groups with institutional data providers to guide definitions and processes
 - Funded by the National Science Foundation

Let's continue the conversation!

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