Although traditionally seen as preparation toward the professoriate (Austin & McDaniels, 2006), the U.S. doctoral education have faced with a declining academic job market (Flaherty, 2018) and more new Ph.D.s are entering into non-academic positions (Etmanski, 2018; Reithmeier, et al., 2019).

Job preferences and perceptions of a “career in research” among U.S. doctoral students have also been shifting over time (Fuhrmann, Halme, O'Sullivan, & Lindstaedt, 2011; Roach & Sauermann, 2017). Ph.D. career pathways are also not as linear, and there is no singular pathway to faculty and administrative positions at colleges and universities (Okahana, 2019).
The state of affairs

Figure 1

DISTRIBUTION OF THE INSTRUCTIONAL FACULTY WORKFORCE BY APPOINTMENT AND INSTITUTION TYPE, 2016

Compiled by the AAUP Research Office from IPEDS data; accessed July 3, 2018. Excludes tribal colleges and institutions with a special focus. Totals may not equal 100 percent because of rounding.

Source: Inside Higher Ed.
The state of affairs

Figure 3

LENGTH OF CONTRACT FOR FULL-TIME, NONTENURE TRACK INSTRUCTIONAL FACULTY, 2016

INSTITUTION TYPE

Compiled by the AAUP Research Office from IPEDS data; accessed July 3, 2018. Excludes tribal colleges and institutions with a special focus. Totals may not equal 100 percent because of rounding.

Source: Inside Higher Ed.
The State of Affairs

Distribution of instructional faculty, by tenure status, FY 2003 and FY 2013

- Public research
  - 2003: 20%, 24%, 57%
  - 2013: 24%, 26%, 50%

- Public master's
  - 2003: 10%, 40%, 50%
  - 2013: 12%, 44%, 44%

- Public bachelor's
  - 2003: 11%, 34%, 55%
  - 2013: 13%, 49%, 38%

- Public community colleges
  - 2003: 13%, 67%, 20%
  - 2013: 14%, 69%, 17%

- Private research
  - 2003: 18%, 36%, 44%
  - 2013: 23%, 34%, 47%

- Private master's
  - 2003: 14%, 58%, 31%
  - 2013: 18%, 58%, 26%

- Private bachelor's
  - 2003: 11%, 35%, 48%
  - 2013: 20%, 40%, 40%

Legend:
- Green: Full-time contingent faculty share
- Blue: Part-time contingent faculty share
- Brown: Tenure or tenure-track faculty share

The State of Affairs

Change in average number of FTE instructional faculty per 1,000 FTE students, by tenure status, FY 2003–FY 2013

What the pipeline looks like.
The desirability of jobs at Research Universities was higher among 5th year doctoral students than 2nd year students.
There seems to be different “appeals” for different sectors of desirable employment sectors among Ph.D. students.

<table>
<thead>
<tr>
<th>Importance of Various Factors in Weighing Immediate Post-Doctoral Employment Among 5th Year Doctoral Students who Selected Research University as Very Desirable and Business/For-profit Company as Very Desirable</th>
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</thead>
<tbody>
<tr>
<td>Extremely important</td>
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</table>

Data Source: Council of Graduate Schools, Understanding PhD Career Pathways for Program Improvement (NSF/DGE #1661272 and Mellon Foundation #3160061), Fall 2018 Alumni Survey. Analysis by the Council of Graduate Schools. Any opinions, findings, and conclusions or recommendations expressed in this figure do not necessarily reflect the views of the funders.
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50% of all PhD pursue academic careers after graduation.

~73% of academic positions are non-tenure track positions.

STEM academic employment has dropped 8% over the past 10-years

The decline in tenure track university positions is changing the culture of the graduate community leading newly minted PhDs to pursue position that offer greater job security and reward over the increase insecurity of academic positions.
What is leading fewer to pursue academic careers

Unmatched growth in global & domestic technology careers

Increasing acceptance of the value of non-academic STEM careers

Scholarly alternate: Scholarly work is increasing being down outside of the academy

PhDs are not always required for successful STEM careers

Changing demographics of trainees
Challenges

Failure to replenish the academic/university talent pool
References


Inside Higher Education