

## Possible Futures in Graduate Education: Shaping the Future You Want

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### Profile of the Successful Graduate School 2025

- Broad faculty investment in strong research and effective mentoring of students
- Comprehensive system for tracking career outcomes of graduates
- Established routines for using feedback to improve programs
- Curricula that produce globally competent graduates



#### Accountability



"Mind you, I'm not responsible for the entire pipeline – just the section that flows through my office."



#### Mentoring is Omnipresent

Mentoring is omnipresent in graduate education because all relationships between faculty and students are a form of mentoring, but <u>effective</u> mentoring is not!



## U.S. Research Confirms Good Mentoring Impacts:

- Retention
- Degree Progress
- Student Satisfaction
- Research Productivity
- Clear Academic Expectations
- Degree Completion
- Professional Development



#### Department/University Role in Mentoring

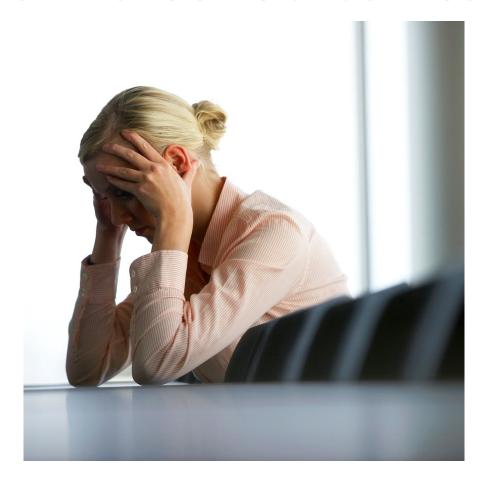
- Orientation session for students (and faculty)
- Student handbook outlining benchmarks, milestones, expectations
- Assign first year advisor
- Annual review of student progress
- Support professional socialization
- Evaluate mentoring in faculty performance
- Reward excellent mentoring



# Successful Graduate Schools in 2025 Will: Track Career Outcomes of Graduates

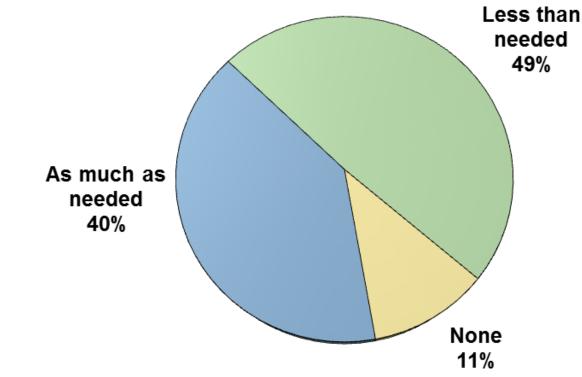


## Students Lack Information on Career Outcomes





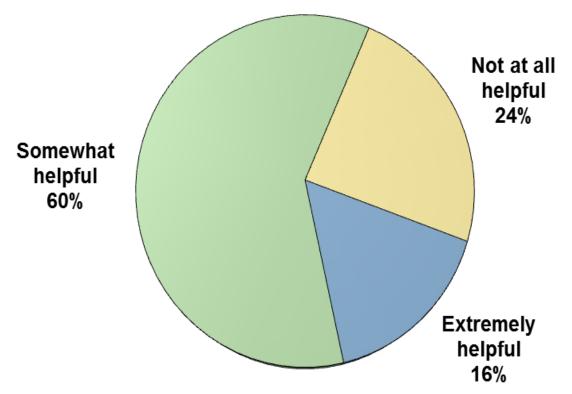
### When you were considering graduate school, how much information did you receive about potential careers?



Source: ETS-CGS Pathways Project Student Survey, 2012



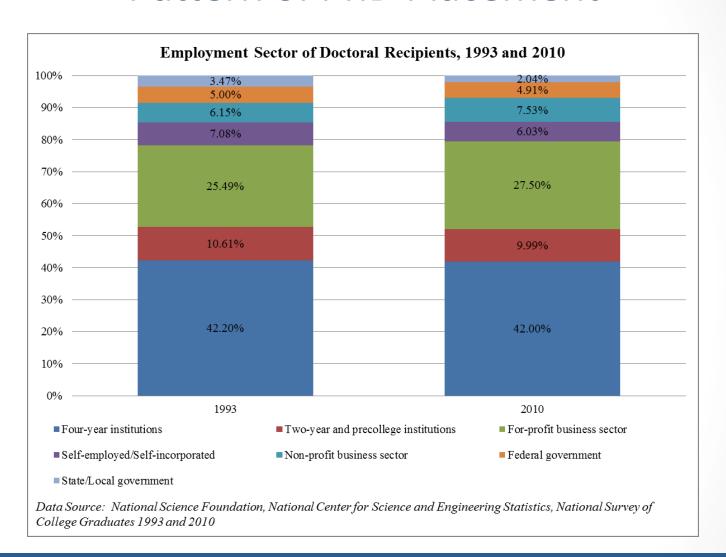
### When you were considering graduate school, how helpful was the information you received about potential careers?



Source: ETS-CGS Pathways Project Student Survey, 2012



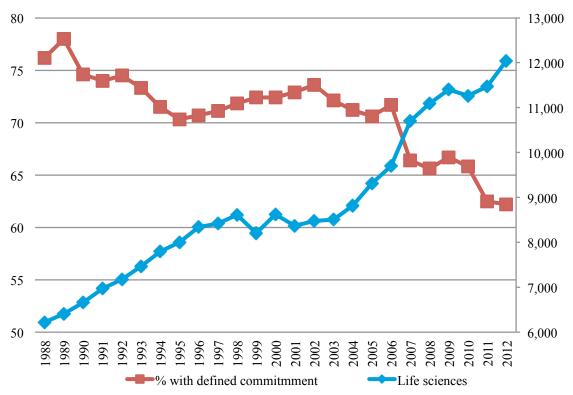
#### Pattern of PhD Placement





#### Obscure Career Pathways Create Mismatch

Percentage of Life Sciences Doctorate Recipients with Defined Commitment for Employment or Postdoctoral Study and Number of Doctorate Recipients, 1988-2012



Data Source: National Science Foundation, Survey of Earned Doctorates



#### Doctoral students' career expectations: Principles and Responsibilities. The Royal Society, 2014 (royalsociety.org)

- Raise awareness of issues in managing PhD career expectations
- Offer possible solutions
- Encourage HEIs to implement solutions



### Successful Graduate Schools in 2025 Will: Establish Routines for Using Feedback to Improve Programs



### Are We Aligning Education with Skills Sets Required?

Students Perceived Importance and Level of Preparedness Across Skills

	Very	Very
Skill	important	prepared
Creativity	55%	<b>39</b> %
Oral communication	83%	54%
Teamwork	<b>72</b> %	47%
Resilience	67%	47%
Planning and organization	78%	52%
Ethics and integrity	75%	54%
Technological comfort and savvy	50%	39%
Publications	20%	30%
Research skills	38%	56%
Writing skills	70%	66%
Analysis/synthesis of data	65%	62%
Teaching and training	45%	38%



### Graduate Studies Professional Development Programs Operated through Canadian Graduate Schools

- Concordia University: GradPro Skills
- Univ. of British Columbia: Graduate Pathways to Success
- McGill University: SkillSets
- Memorial University: EDGE
- Queen's University: Expanding Horizons
- University of Toronto: Graduate Professional Skills
- Victoria University: Pathways to Success
- Western University: 360°
- Brock University: GradPlus
- University of Ottawa: Attitude



### What Kind of Professional Development is Needed by Graduates of Program X?

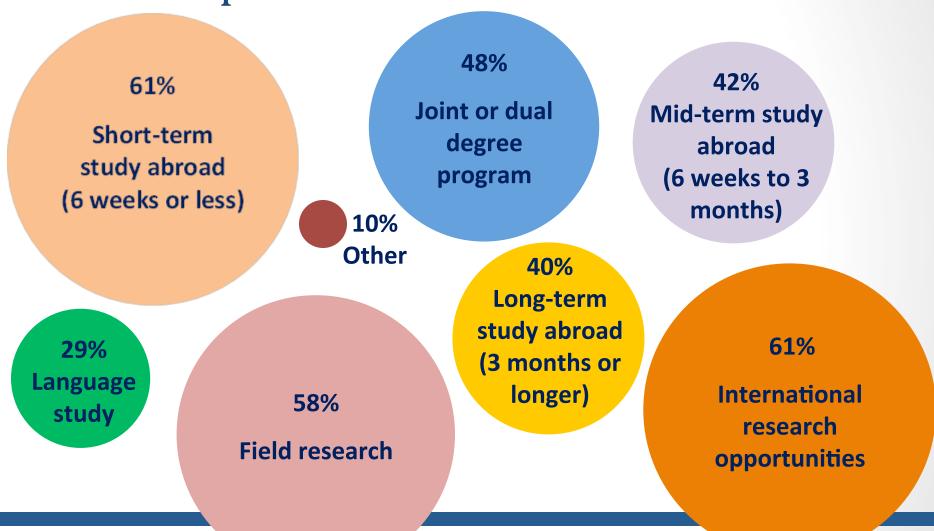




# Successful Graduate Schools in 2025 Will: Produce Globally Competent Graduates



#### Main Vehicles for International Graduate Experiences for All Institutions



## How do US graduate schools promote global competence?

- International experiences more dominant in Research Universities
- Research related experiences dominate across the board
- Major barriers \$ and family related
- Quality metrics not unique to international, but contribution of international experiences to conventional quality metrics recognized





