Improving Non-Academic Career Preparation for Doctoral Students

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Agenda

I. Doctoral Education in the United States
  - I. History of Doctoral Education
  - II. Current Employment Trends for Doctoral Graduates

II. Non-Academic Careers
  - I. Needs of Students
  - II. Current Barriers

III. Group Discussion

IV. Moving Forward
  - I. Promising Practices
  - II. Needs of Future Research

Overview of Doctoral Education in the United States
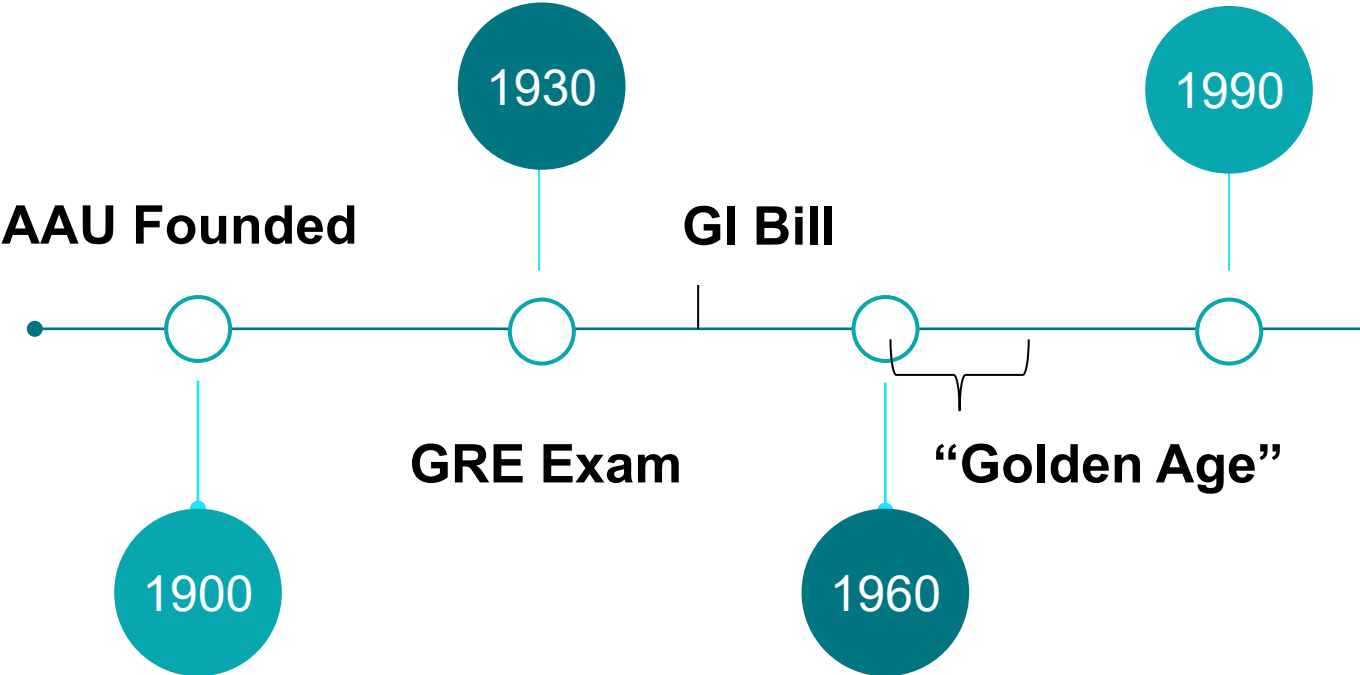
Origins and Standardization

1876 – Johns Hopkins Founded

1900 – Association of American Universities (AAU) founded [10]

❖ Standards for coursework
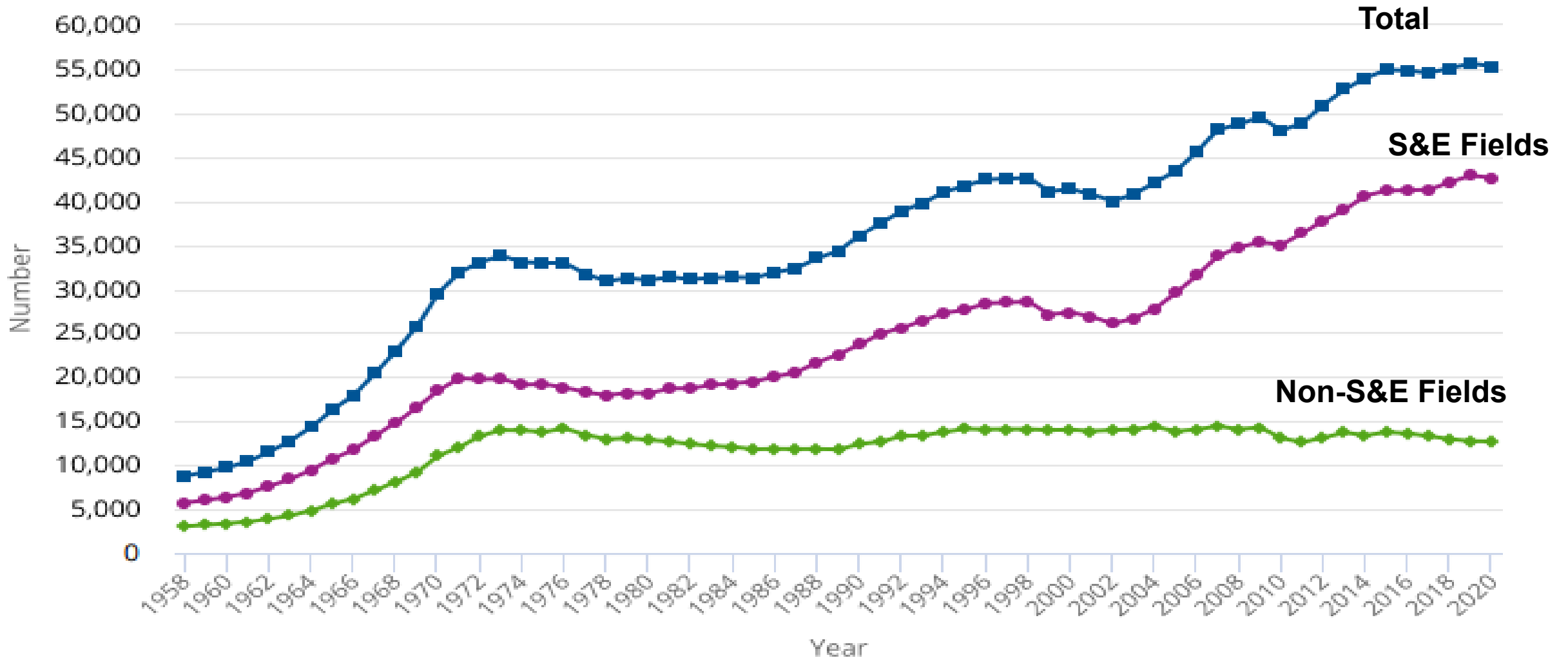
❖ Minimum credit requirements

❖ Accreditation process

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Graduate Education in the U.S.

AAU Founded

1930

GI Bill

1990

GRE Exam

"Golden Age"

1900

1960

1960-1970: "Golden Age" of higher education [8]

Eventually, certain fields became saturated with prospective faculty. [15]

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Doctorates Awarded in the U.S.
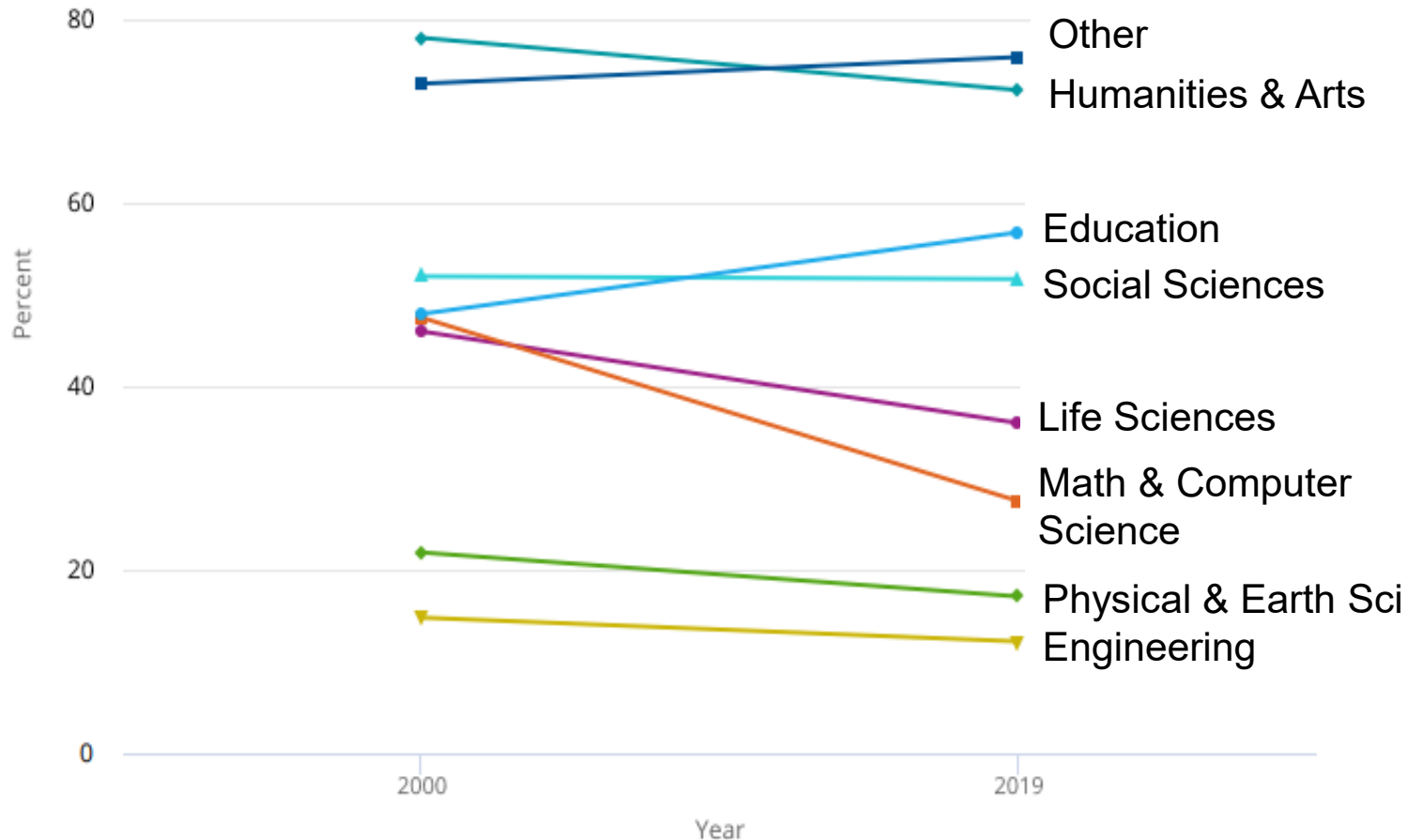
Source: National Center for Science and Engineering Statistics, Survey of Earned Doctorates, 2020.

Current Career Placement by Field

On average, 50% of doctoral graduates enter academic positions after graduation.

Highest: Humanities (~75%)

Lowest: Engineering (~15%)

Note. This model was produced by the National Center for Science and Engineering Statistics in 2019, showing career placement by field for 8 different fields of study. From "Survey of Earned Doctorates," by the National Center for Science and Engineering Statistics, 2019, National Science Foundation, NSF 21-308.

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Non–Academic Career Preparation

Doctoral Preparation by Career Type

Academic Positions [17]	Non-Academic Positions [17]
Advising & Teaching	Working in Teams
Administration & Service	Interdisciplinary Experience
Writing & Publishing	Advanced Problem Solving
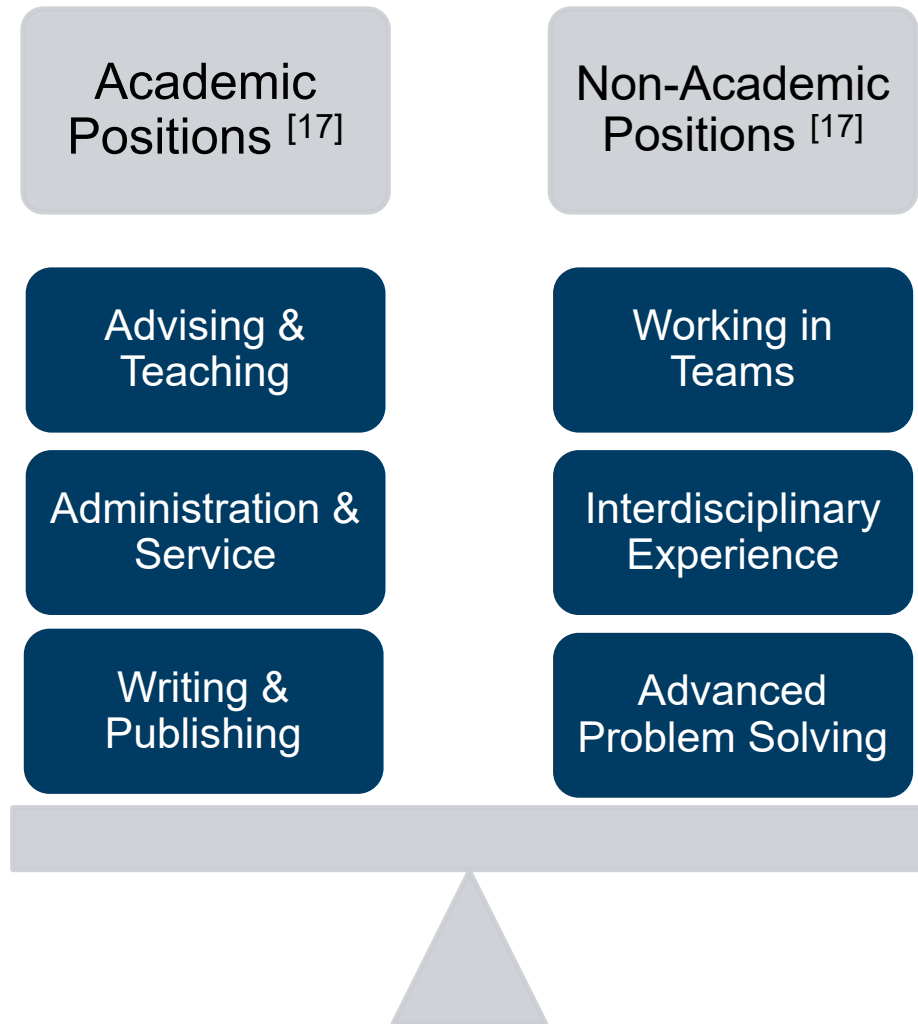
Transferable Skills [17][22]

- Communication
- Leadership
- Career Planning
- Facilitation
- Project Management

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Career Aspirations of Doctoral Students

72%

Of students and postdocs "strongly considering" non-academic careers [19]

66%

Of students experience a change of career goals during their graduate program [4]

29%

Of student receive effective career guidance for non-academic careers [6]

Inequities in Doctoral Career Preparation

BIPOC students in doctoral education report:

- ❖ Additional barriers to career development [9]

- ❖ Less interest in academic positions [11]

These students are also more likely to experience changes to career goals during their program [4]

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What Barriers Exist to Diverse Career Preparation?

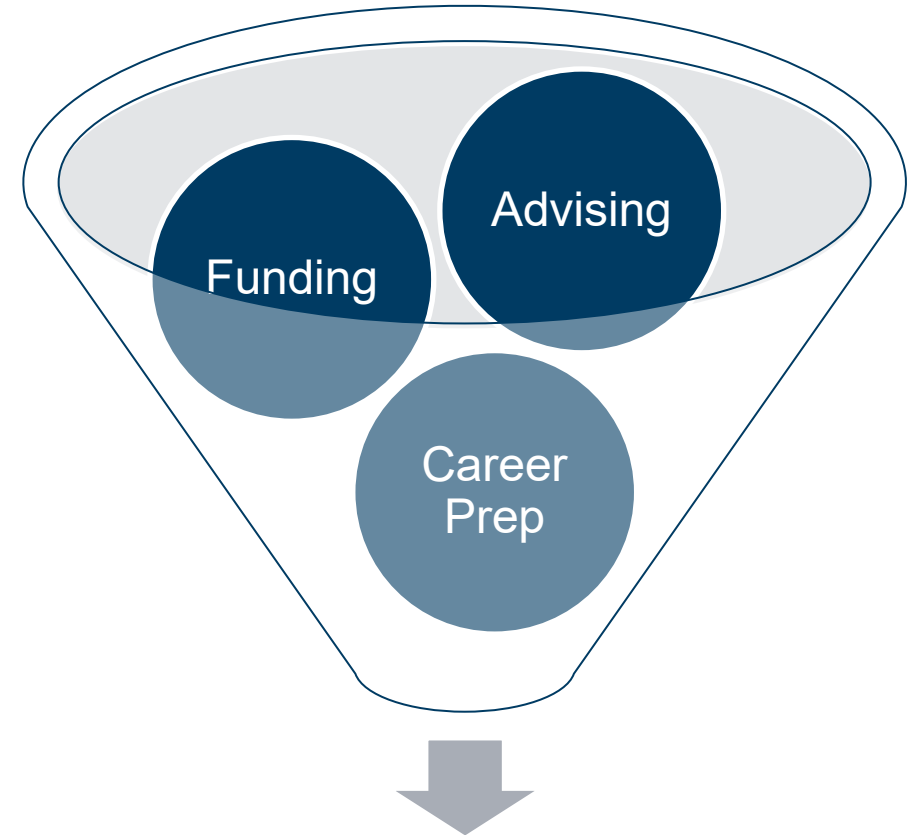# Barriers to Diverse Career Preparation

What has prevented us from adapting our career preparation methods?

- ❖ Advising Structure [4][10][20]

- ❖ Disconnect from Industry [2][20][22]

- ❖ Challenges Associated with Reform [13][21]

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Apprenticeship Model of Advising

Faculty advisors bare the responsible for training their advisees, funding their studies, overseeing their degree program, and preparing them for future careers. [6][10]
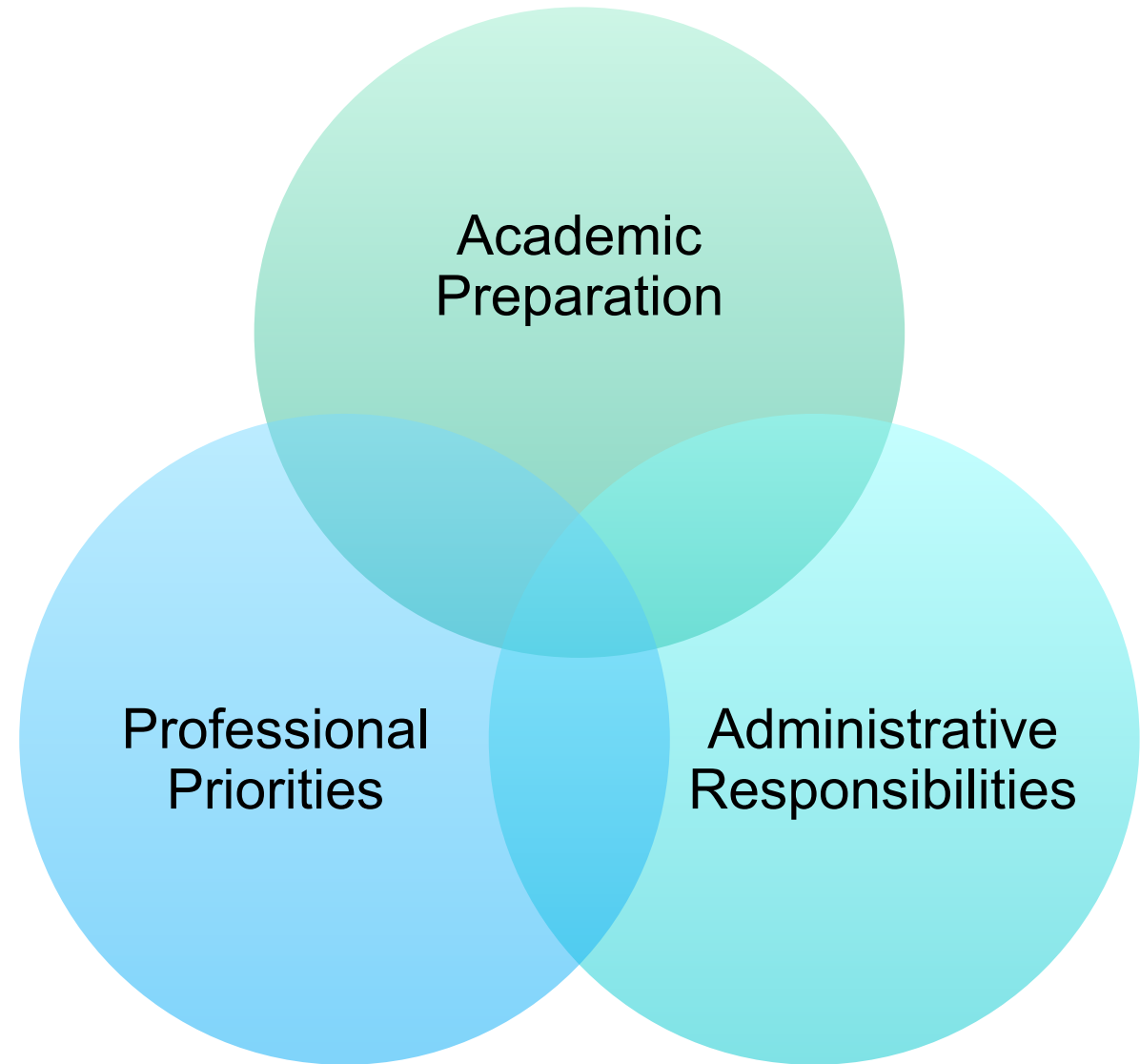

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Reform Efforts (2000-2023)

The last two decades have seen many attempts to reform doctoral career preparation [13]. Many of these efforts were funded by foundations:

The Humanities at Work (1999-2006)

The Responsive PhD (2001-2006)

Carnegie Initiative on the Doctorate (2002-2006)

Graduate Teaching Fellows in K-12 Education (1999-2011)

Public Fellows Program (2011-present)

Career Diversity for Historians (2013-present)

AAU PhD Education Initiative

Next Generation Humanities PhD (2016-2019)

myIDP (Individual Development Plan) (2003-present)

Imagine PhD (2017-present)

Research Traineeship Program (NRT)

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Challenges to Reform Efforts

Many of these reform efforts have faced challenges in reaching their stated goals [13][21]

- ❖ Lack of accountability

- ❖ Faculty reluctance

- ❖ Lack of institutional funding

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Group Discussion

1. How has your institution addressed non-academic career preparation?

2. What barriers have you experienced in preparing students for diverse career outcomes? What has worked well?

Optional: What did your career preparation look like in graduate school?

Best Practices

Central Support
- Demystify "hidden curriculum" [14]
- Graduate counseling [21]
- Professional development [12][23]
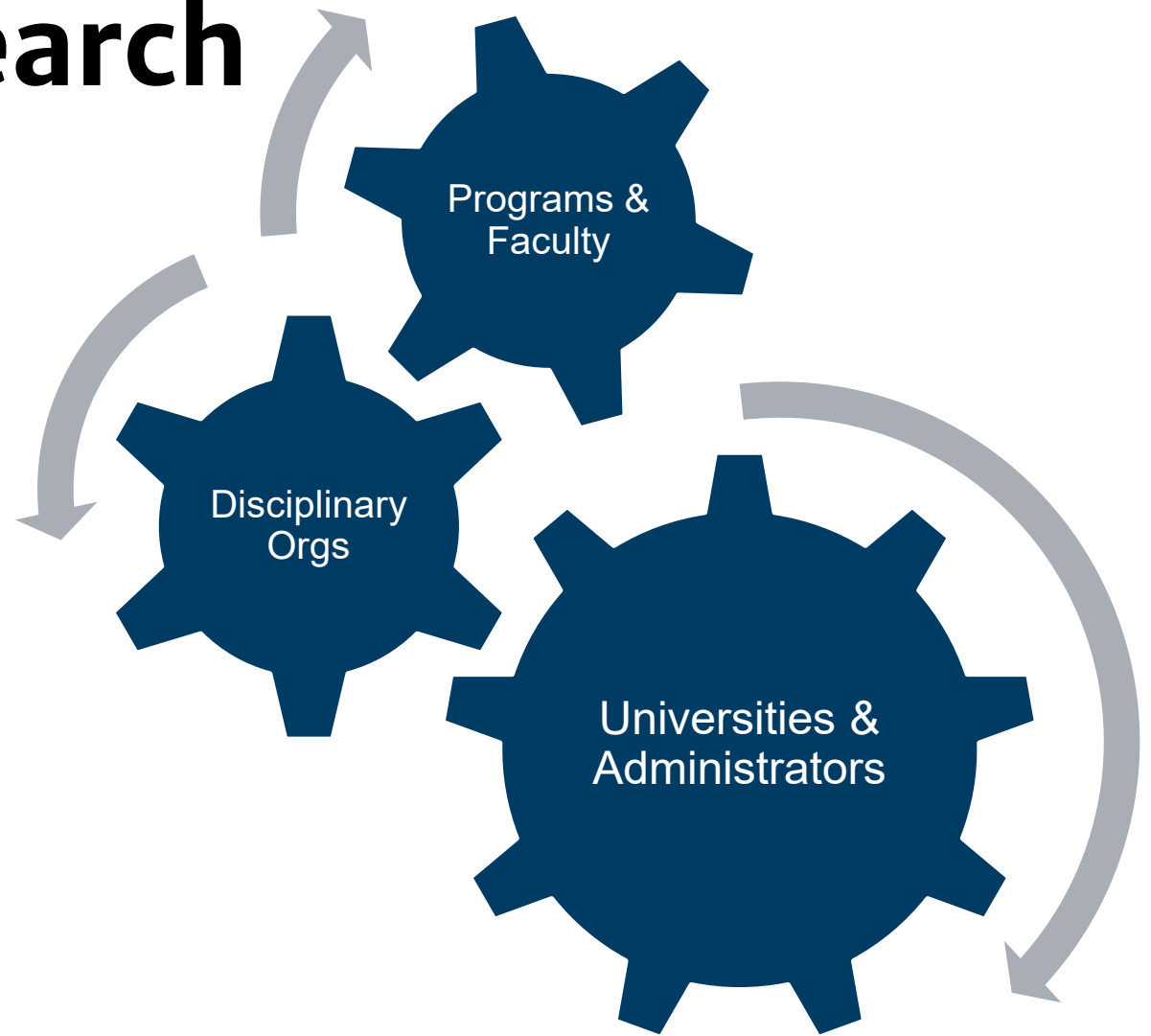- Communicate outward [6]

Faculty
- Advising statements [24]
- Prepare students for current job market [21]
- Learn industry standards [21][24]
- Allow flexibility [11]

Students
- Individual Development Plans (IDP) [3][16]

Needs of Future Research

- Advising teams or alternative structures (e.g., UI-CATIE)

- Academic disciplines must assess what students need [21]

- Alternative ways to assess doctoral competencies [7]

- Partnerships with industry [4]

Programs & Faculty

Disciplinary Orgs

Universities & Administrators

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"So as we seek to improve doctoral education, we need... to extend its strengths: the opportunities to delve deeply into a cherished field of study and make discoveries, to work closely with expert faculty, and to bond with other students who share the same interest and dedication"

(Weisbuch & Cassuto, 2021, p. 2–3)

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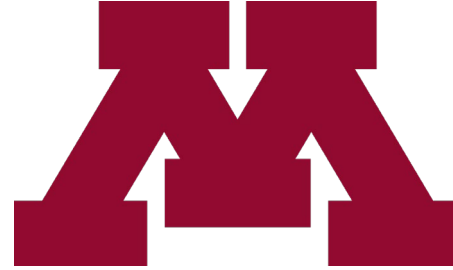
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