



AAU PhD Education Initiative Goals and Definitions

Objective

The PhD Education Initiative aims to change the culture surrounding doctoral education at AAU member institutions so that graduate education is more student-centered,¹ placing greater emphasis and focus on students as individuals with diverse educational and professional interests, needs, and challenges. The Initiative's objective is to make the full range of PhD career pathways² visible³, valued⁴, and viable⁵ for **all** students⁶.

The long-term goals of the Initiative are:

Institutional Change. Influence the culture and behavior in departments to foster increased inclusion of current and prospective doctoral students from diverse backgrounds and to provide PhD students with the knowledge, skills, and abilities to succeed in careers within and beyond academia.

Data Transparency. Adopt institutional policies and practices to make PhD program data—including data about the career pathways and employment trends of PhD alumni—widely available.

Strategies. Highlight and encourage effective university, disciplinary society, and federal agency strategies and programs.

Problem Statement & Definition of Key Terms

(1) Fostering STUDENT-CENTERED Educational Environments

Reorient the educational environment to prioritize students as individuals with diverse educational and professional interests, needs and challenges.

Doctoral education in AAU universities is deeply intertwined with the university research and teaching enterprise. This provides unparalleled apprenticeship learning opportunities for doctoral students. However, the demands of the research enterprise, individual faculty member's research goals, and institutional teaching needs often supersede students' educational interests and needs. As a result, students may hide their professional ambitions or feel unable to broaden their education.

The Initiative aims to influence institution and department cultures at AAU universities so that they promote more student-centered educational environments for all doctoral students. Student-centered education systems are those which prioritize the needs and interests of graduate students, rather than focusing first and foremost on the interests of higher education institutions and the demands of the research enterprise. Our definition follows the recent National Academies report on Graduate Education for the 21st Century (NASEM, 2018).

Putting the interests and needs of graduate students at the center will entail change for individual advisors and for doctoral programs. At the program level, it requires rethinking the core doctoral curriculum and requirements. How can skill development—such as working effectively in teams, business acumen, and leadership competencies (NASEM, 2018, p. 112)—be integrated into the curriculum? What are strategies for permitting students the flexibility to add an internship or build skills via courses in other departments on campus? Doctoral mentoring and advising requires time and effort. For some individual faculty advisors, centering students' interests and needs may result in changes in practice as students become active participants in setting their specific individual goals.

In the long run, reorienting doctoral education to a student-centered educational environment is a shift in culture. It may demand changes in funding and advising. In many cases, it may result in reallocating faculty time and energy. It may require rethinking measures of faculty success.

As a first step, student-centered educational environments support students' diverse educational and professional goals. Specifically, this entails:

- Recognize each student's specific educational and professional interests, their needs, and their challenges.

- Ensuring that every student's educational goals are clear and that decisions about how students spend their time are based on their educational needs and goals, not solely on demand for research productivity.
- Regular conversations between faculty advisors and students about students' goals and plans. Tools such as regular advising committee meetings and an annually updated Individual Development Plan can be required.
- Providing curricular flexibility and time for students to engage in professional development of their choosing. Ensuring that students are aware of the resources available on their campus.
- Develop mechanisms for student feedback and input in departmental practices to ensure that student educational interests and needs are not superseded by other institutional priorities.

(2) Full Range of CAREER PATHWAYS

Support the full range of careers both within and beyond academia.

Historically, the predominant career path for PhD-recipients has been as a faculty member in a North American college or university. The reality has changed and doctoral education must catch up. In all disciplines more than half of new PhD degree recipients will work in roles beyond academia. We define diverse career pathways as those leading to business, government, and nonprofit sectors, as well as to academia. Roles in academia include tenure-line faculty positions, other teaching titles, and the great variety of administrative staff roles for which PhD-holders are well suited. We do not value or prefer one of these employment sectors over another.

Moving successfully into these positions requires that PhD students have the opportunity to explore the range of possibilities in conjunction with self-assessment of values, skills and interests; are able to prepare for their next career stage; and are then able to successfully pursue their careers of choice. It is not required that faculty members develop expertise in the requirements for each sector. Rather faculty advisors should support students as they explore, prepare for, and pursue their next professional chapter.

(3) Making full range of career paths more VISIBLE:

Full range of career pathways of PhD alumni are known by institutions, departments, faculty, current and prospective students, and the campus community.

For most of the 20th century, conventional wisdom held that the majority of PhD recipients were employed as faculty members following receipt of the PhD. Doctoral programs were structured with that presumption; thus, those who moved to careers beyond academia were often perceived as outliers. Today's reality is that the majority of PhDs are employed in business, government and non-profit sectors. However, to doctoral students, these career paths are less visible than the path to academic employment. For students and faculty to fully

December 11, 2019

embrace career diversity, they must see the careers that PhD recipients in their field enter and their paths through them.

Making the broad array of PhD career pathways visible requires that institutions and departments be knowledgeable about where PhD alumni are employed, and this information would be shared with current and prospective students, the campus community, and the public. Specifically:

- Making comprehensive employment data (at multiple time points after graduation) be publicly visible at each university and available to each department and program
- Knowing the employment fates of recent alumni for every department and making their paths visible to current and prospective students. This could include featuring alumni in on-line and paper publications, and invitations to campus to share their experiences and to mentor students.
- Understanding the paths and employment outcomes by discipline and area. This requires partnership with disciplinary societies.

(4) Making full range of career paths more VALUED:

Department cultures and structures ensure that students will feel supported as they explore the full range of career options.

The lives of doctoral students are powerfully shaped by their home department and degree program. Many students perceive that some career paths—especially that of tenure-line faculty member—are much more valued than jobs beyond academia. Individual faculty members are seen as crucial gatekeepers: their support and encouragement (or opposition) to their doctoral advisees' career choices are powerfully influential. The challenge to doctoral programs, note Weisbuch and Cassuto (2016), "is not to substitute a non-academic career goal for a professorial one, but to provide a means of accommodating both" (p. 43).

Making the full range of careers that PhD graduates have pursued valued means departments must create cultures and structures that endorse and celebrate career diversity, rather than expressing the idea that some careers or employers are "better" than others. It is crucial that faculty encourage (rather than ostracize) students who choose to pursue careers beyond academia. This requires integrating conversation—into all stages of graduate education—about career diversity and encouraging students to explore a range of opportunities. Specifically:

- Integrating conversations about diverse possible futures into the curriculum and departmental conversations from admissions through commencement.
- Ensuring that students will feel supported (rather than shunned) as they explore various career options.
- Departmental leaders and all program faculty publicly support diverse career outcomes for the students whom they teach, advise and supervise.
- Actively connecting alumni with current students

Suggested citation:

Association of American Universities. (2019). *AAU PhD Education Initiative Goals and Definitions*. <https://www.aau.edu/sites/default/files/AAU-Files/PhD/goals-and-definitions.pdf>

(5) Making pursuit of full range of career paths more VIABLE:

Institutional and departmental resources are available and accessible to help students develop the knowledge and skills necessary to enter careers of choice.

Over the last twenty years the idea that doctoral programs should prepare students for a range of careers has firmly taken hold nationally. This is accepted even in the humanities—the area with the highest percentage of PhD-holders in faculty careers. Further evidence of this acceptance is the dramatic increase in the availability of resources on university campuses to help PhD students develop professional skills—from teaching, to grant-writing, to communication, to leadership. In addition, many campuses offer career counseling services specifically for graduate students. The crucial next step is to integrate campus-wide resources into each department.

Making the pursuit of diverse career pathways viable requires making institutional and departmental resources available and accessible to students to help them develop the knowledge and skills necessary to enter careers of choice. PhD students would be supported and encouraged to broaden their skills and knowledge within the context of making satisfactory progress in their primary degree program. Specifically:

- Partnership with campus career centers. Career centers and graduate schools are hiring career counselors with expertise in working with doctoral students and postdoctoral scholars. Connecting students with these professionals can help students to prepare for multiple career options by teaching effective career exploration and job seeking skills.
- Ensuring that students are aware of, and able to take advantage of, campus resources for professional skill development.
- Integrating skill development—general skills such as project management, team-work, and communication, as well as discipline-specific skills—into the curriculum.
- Supporting students in short internships or work experiences.

(6) Making career diversity possible FOR ALL STUDENTS:

Foster the full inclusion of current and prospective doctoral students from diverse backgrounds.

Students from all racial and ethnic backgrounds enter their doctoral program with a unique blend of prior experiences, educational ambitions and professional goals. Doctoral education is most effective when students feel that they belong in the departmental and university community through the many years of doctoral study. Creating an inclusive environment demands change from many individuals.

The reality on university campuses today is that the campus culture and departmental climates are rarely equally welcoming and hospitable to all students. The legacies of segregation and legal discrimination mean that students of color, women, first generation college students, as well as students with disabilities, from religious minorities, and those of diverse sexual

December 11, 2019

orientation and gender expression, do not perceive that the university welcomes them nor wishes to fully include them as members of the university community. This is probably even more starkly true in doctoral programs than in undergraduate life because of the lack of diversity in the graduate student and faculty populations. As a result, we must actively work to make doctoral education effective for all students.

Ensuring that access to diverse careers is available to **all** students requires more than simply doing new things in the traditional ways. It requires us to:

- Actively create and nurture departmental communities that include all students, faculty, and staff.
- Assume that departmental and campus resources are not used equitably or are inclusive; work to understand where unequal outcomes are present; and consider how to ensure all students are supported.
- Engage in training to reduce unconscious bias in departmental practices such as admissions, hiring, fellowship allocation, and advising.
- Actively engage students as partners in reshaping the departmental culture and climate to be fully welcoming and supportive of all students.

References:

National Academies of Sciences, Engineering, and Medicine. (2018). [*Graduate STEM education for the 21st century.*](#)

Weisbuch, R. and Cassuto, L. (2016). [*Reforming doctoral education, 1990-2015: Recent initiatives and future prospects.*](#) A Report Submitted to the Andrew W. Mellon Foundation.

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