PhD Completion Project

Stephan Groschwitz, Aaron Howell, Kim Downing, Caroline Alikonis and Robert Brackenbury

Graduate School & Institute of Policy Research
University of Cincinnati
PhD Completion Project

Two Components

• Data Collection, Analysis and Dissemination

• Students Expectations and Experiences: Longitudinal Study
Longitudinal Study Characteristics

- Fall 2005 incoming Ph.D. students in 27 UC Doctoral Programs
- A cohort of 164 students in the study
- Students surveyed once per year until they exit their program (leave or complete)
- Students notified by e-mail to complete surveys via a dedicated Web site
Doctoral Programs in Study (27 programs)

- Chemistry
- College of Business
- College of Engineering
- College of Medicine
- College of Nursing
- Communication Sciences and Disorders
- Criminal Justice
- English and Comparative Literature
- Geology
- Physics
- Psychology
- Sociology
Longitudinal Study

- Survey Topics Each Year
  - Expectations of graduate program, program curriculum, advising/mentoring, resources and graduate environment.
  - Important factors in completing a degree.
  - Career aspirations.

- Specific Topics
  - Year 1: Reasons considering doctoral program; Reasons choosing UC.
  - Year 2: Reasons for not continuing.
  - Year 4: Experience and expectations; experience of non-continuing students; advising.
Cohort Characteristics

Gender and Field of Study

- Male H/SS: 13%
- Female H/SS: 15%
- Female STEMM: 23%
- Male STEMM: 49%
Cohort Characteristics: International Students

- **Domestic**: 55%
- **International**: 43%
- **Missing**: 2%
Importance of factors in ability to complete doctoral degree

(Scored ranking all three “most important” responses)
Importance of factors in ability to complete

(Scored ranking all three “most important” responses)

Top 3 factors Overall and of Males in STEM Disciplines Across Years

- Year 1
- Year 2
- Year 3
- Year 4

- Financial support
- Mentoring/advising
- Personal motivation
- Overall Financial Support
- Overall Mentoring
- Overall Motivation
Importance of factors in ability to complete

(Scored ranking all three “most important” responses)
Importance of factors in ability to complete (Scored ranking all three “most important” responses)
Importance of factors in ability to complete

(Scored ranking all three “most important” responses)
Summary

• Four distinct patterns across STEMM and H/SS disciplines and Gender
  – Male STEMM students:
    • Above average importance of financial support. Below average importance of mentoring and advising in the first year give way to more importance in mentoring and less in financial support. Still, ‘typical’ pattern of financial first, mentoring second, motivation third prevails
  – Female STEMM students
    • Value mentoring and advising well above average, and financial support well below average from year 1 on. The importance of mentoring even increases over time. By year 4 personal motivation draws for second most important factor with financial support.
Summary

- Male H/SS students:
  - Financial support is roughly on par with the average. In the first year, mentoring and advising is seen as less important than the average, and personal motivation as notably more so. This pattern increases in year two, after which it reverses in favor of a much higher ranking of mentoring and advising, and a decreased importance of personal motivation.

- Female H/SS students:
  - Average pattern of financial support, mentoring, and motivation in year 1 shows increase in the importance of mentoring well above the average.
Confidence in completing degree within self-reported time frame

Expected Time To Degree and Confidence in Completing In Time

<table>
<thead>
<tr>
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<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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Confidence in completing degree within self-reported time frame

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Confidence in completing degree within self-reported time frame

**Expected TTD and Confidence in Completing for Females**

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Expectations & Experiences with Program

- New questions in Years 3 & 4 asked about experience with some aspects of program, not just expectations
  - Four questions on Graduate Environment/Integration in Program
  - Five questions on Advising/Mentoring regarding exams and dissertation research
- Subtract expectation from experience for a ‘satisfaction’ score
  - Positive value means experience exceeds expectations, negative score means experience does not meet expectations
Satisfaction with Financial Support

Shades of red indicate experiences not meeting expectations to varying degrees, green indicates experiences exceeding expectations, and white indicates experiences meeting expectations.
Factors contributing to attrition...

- As Fall 2009, at least 34 students did not continue in their program

- Main factors contributing to attrition:
  - Personal motivation
  - Mentoring/advising
  - Program quality

- Comments included:
  - Career opportunity/advancement
  - Mentor/advisor left
  - Financial support
  - Did not fit in program
  - Program tailored for academic career path
  - Uncertainty about future
  - Program too competitive, too much stress
Satisfaction with Mentoring/Advising

Year 4: Satisfaction With Assistance In Selecting a Dissertation Topic

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Satisfaction with Mentoring/Advising

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Satisfaction with Mentoring/Advising

Shades of **red** indicate experiences not meeting expectations to varying degrees, **green** indicates experiences exceeding expectations, and **white** indicates experiences meeting expectations.
Interventions

Raising Awareness on Completion
- PhD completion data part of annual GRAAD report
- Annual individual discussion with deans
- Spring forum with GPDs on PhD completion
- Annually reported to Graduate Council & Graduate Faculty

Assessment
- Metric in Graduate Program Review
Interventions

Enhancement of Learning Opportunities
- Established Graduate Student Professional Development Center
- Appointed Faculty Director of Center

Support Activities
- Women’s Graduate Student Association
- Mentoring for Male African-American Doctoral Students

Financial Resources
- Leverage Enhanced Assistantship Budget
- Advocate for Two-Year Assistantship Budget
Acknowledgement

Thanks to Council of Graduate Schools for:

- Funding for Phase I and Phase II
- Raising awareness of doctoral completion