The Council of Graduate Schools
Ph.D. Completion Project

AGEP Evaluation Capacity Building Meeting, San Juan, PR, 1/2/2007

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“Lessons Learned”

- Decisions about data collection have:
  - Rhetorical implications, and
  - Policy implications
- Rhetorical frameworks have implications for data collection
- In data presentation and use:
  - Context is all, and
  - Collaboration is crucial
The Ph.D. Completion Project: Phase I (2004-2010) Overview

- Supported by Pfizer Inc and the Ford Foundation
- To pilot designed intervention strategies and evaluate their impact on completion rates and attrition patterns
- 21 Research Partners ($) and 24 Project Partners; more universities will join in 2007
- Physical and Life Sciences, Engineering, and Mathematics, Social Sciences and Humanities
AGEP universities in the PhD Completion Project

**Research Partners:**
- Arizona State University
- University of California-Los Angeles
- University of Florida
- Howard University
- University of Maryland-Baltimore County
- University of Michigan
- University of Missouri-Columbia
- University of North Carolina Chapel Hill
- North Carolina State University

**Project Partners:**
- University of California-Berkeley
- University of Colorado
- Jackson State University
- University of Maryland College Park
- New Mexico State University
- University of Puerto Rico
- Syracuse University
- Western Michigan University
The Completion Dilemma

Nationally, Ph.D. attrition was unacceptably high
  - But no consensus on what completion rates are, what they mean, or how to collect the data

Underrepresented minorities and women were completing at lower rates than majority (white) students and men, respectively
  - But no clear understanding about why

Minorities and women are graduate education’s future
CGS’s Solution: Multiple Perspectives on Ph.D. Attrition

- Research and “Best Practice” Model
- Multiple Fields and Diverse Institutions
- Completion Rates
  - By program
  - By field/demographic group
- Attrition Patterns
- Exit Surveys
- Institutional and Program Self-Assessment
Limitations

- Completion Data by race/ethnicity, gender, and citizenship submitted in aggregate for broad field, not program

- Exit Survey responses can be correlated with program, not demographic characteristics
  - Demographic characteristics correlated with field, not responses

- Correlations between individual student characteristics (financial, demographic, test scores, PT/FT status) and completion rates not possible
Rhetorical Perspectives: Half Empty or Half Full

■ The “Half Full” Argument
  □ Attrition = quality
  □ Attrition = the law of supply and demand

■ The “Half Empty” Response
  □ Institutional Causes Require Institutional Solutions
  □ Improve Selection and Admissions
  □ Demographic Differences are Unacceptable
Completion Data:
“Big Picture” Findings have Policy Implications

- Nationally, Ph.D. completion probably *higher* than commonly thought (approx. 57% vs. 50%)
Completion Trends and Timing by Broad Field

Source: Council of Graduate Schools, Ph.D. Completion Project, Baseline Data
Completion Data: “Big Picture” Findings have Policy Implications

- Nationally, Ph.D. completion probably *higher* than commonly thought (approx. 57% vs. 50%), *but field differences create policy challenges*
- Some underrepresented groups are taking *longer* to complete than before, but not necessarily completing at lower rates
- *Overall differences* in minority/majority completion rates are observable, *but field differences* in minority/majority completion rates are pronounced
## Differences in Minority and Majority PhD Completion

<table>
<thead>
<tr>
<th></th>
<th>Under-represented Minorities</th>
<th>7-yr</th>
<th>10-yr</th>
<th>Asian American</th>
<th>7-yr</th>
<th>10-yr</th>
<th>Majority (White)</th>
<th>7-yr</th>
<th>10-yr</th>
<th>Difference between URM &amp; Majority (White)</th>
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</thead>
<tbody>
<tr>
<td><strong>Engineering</strong></td>
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<td>46.4%</td>
<td>58.7%</td>
<td>45.7%</td>
<td>53.6%</td>
<td>52.3%</td>
<td>62.5%</td>
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<td>-5.9%</td>
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<td><strong>Life Sciences</strong></td>
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<td>43.4%</td>
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<td>63.8%</td>
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<td>-10.9%</td>
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<td><strong>Physical Sciences &amp; Mathematics</strong></td>
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<td>40.1%</td>
<td>47.6%</td>
<td>41.8%</td>
<td>52.3%</td>
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<td>54.3%</td>
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<td>-7.9%</td>
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<td><strong>Social Sciences</strong></td>
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<td>31.2%</td>
<td>48.6%</td>
<td>35.4%</td>
<td>48.5%</td>
<td>41.1%</td>
<td>55.4%</td>
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<td></td>
<td>-9.9%</td>
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<tr>
<td><strong>Humanities</strong></td>
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<td>32.4%</td>
<td>52.7%</td>
<td>33.1%</td>
<td>55.4%</td>
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<td>55.3%</td>
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<td>-3.5%</td>
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</tbody>
</table>

Source: Council of Graduate Schools, Ph.D Completion Project Data
## Completion Rates and Timing by Race/Ethnicity and Broad Field

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Native American</th>
<th>Black/African American</th>
<th>Hispanic</th>
<th>Asian American</th>
<th>Majority (White)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>7-yr</td>
<td>10-yr</td>
<td>7-yr</td>
<td>10-yr</td>
<td>7-yr</td>
</tr>
<tr>
<td>Engineering</td>
<td>69.2%</td>
<td>66.7%</td>
<td>38.1%</td>
<td>50.0%</td>
<td>52.2%</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>63.6%</td>
<td>100.0%</td>
<td>41.4%</td>
<td>59.5%</td>
<td>42.7%</td>
</tr>
<tr>
<td>Physical Sciences/Math</td>
<td>54.6%</td>
<td>66.7%</td>
<td>36.4%</td>
<td>41.0%</td>
<td>45.6%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>29.6%</td>
<td>20.0%</td>
<td>33.6%</td>
<td>50.7%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Humanities</td>
<td>29.2%</td>
<td>71.4%</td>
<td>34.7%</td>
<td>53.7%</td>
<td>28.1%</td>
</tr>
</tbody>
</table>

Source: Council of Graduate Schools, Ph.D Completion Project Data
Key Indicators of Attrition

- **Transfer**
- **Stop out**
- **Master’s (w/ and without “en route”)**
  - Not “master’s” at admission
  - Rather does program require master’s
- **Candidacy** (before and after)
  - Candidacy defined in different ways
  - “Default” = “successful completion of prelim. Exams nad/or defense of dissertation prospectus” + *other options*

- **Continuous Registration Policies**
- **Program input with Graduate School sign off**
Areas of Designed Interventions

- Selection and Admissions
- Mentoring
- Financial Support and Structure
- Program Environment
- Curricular Processes and Procedures
- Research Experience
- Professional Development
Lessons Learned

- Definitional differences are not insurmountable

- Strong involvement from graduate deans, IR staff, and program faculty is needed

- In data collection, design, analysis, and reporting: be sensitive to “sensitivities”
  - Completion is gaining acceptance as a metric of *quality* and not just “efficiency”
  - In benchmarking, *context* is everything