The Experiences of First-Generation Students at Large, Public Research Universities: Engagement and Outcomes

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Overview

• First-Generation Students
• Student Engagement
• SERU Survey
• Analysis
• Results
• Suggestions
First-Generation Students

• FG: Definition: neither parent nor guardian has earned a baccalaureate degree
• Lower SES, h.s. engagement, SAT scores, h.s. gpa, & family support
• Lower college gpa, retention, graduation
Engagement

• Amount of time and effort students put into their studies & activities
• How institutions organize learning opportunities and services for students to encourage their participation and enhance benefits (Kuh, 2001)
Engagement for FG Students

• Employment
• Extracurricular involvement
• Academic/classroom involvement

• Gains:
  – Openness to diversity
  – Self-understanding
  – Critical thinking
  – Degree plans
  – Preference for higher-order cognitive tasks (Pascarella, Pierson, Wolniak, Terenzini, 2004)
Engagement for FG Students

• FG students less likely to be academically/socially engaged:
  – Cultural and social transitions
  – Seek assistance
  – Understand faculty expectations
  – Develop relationships with faculty
  – Live on campus
  – Engage in extracurricular activities
Institutional Context

• These challenges can be exacerbated when students enroll at large research universities (the institutional context of the present study), where classes tend to be larger and interactions with faculty members can be limited (Kim, 2009).
Research Questions

• Are there significant differences between first-generation and non-first generation first-year students with regards to their levels of engagement and outcomes?

• Controlling for sociodemographic factors and academic measures, do relationships exist between engagement factors and outcomes among first-generation students?
Student Experience in the Research University (SERU)

- SERU Consortium currently includes 18 universities, including 15 AAU institutions:
  - All 9 undergraduate campuses of the University of California system
  - University of Michigan at Ann Arbor
  - University of Minnesota-Twin Cities
  - Rutgers University
  - University of Florida
  - University of Pittsburgh
  - University of Oregon
  - University of Texas at Austin
  - University of North Carolina at Chapel Hill
  - University of Southern California
SERU Survey

• Systematic environmental scan of the undergraduate experience
• In-depth analysis of the varied types and levels of undergraduate engagement in research universities
• The survey is organized around five thematic research areas:
  – Academic engagement
  – Civic and community engagement
  – Global knowledge, skills, and awareness
  – Student life and development
  – Wildcard module for the University of Minnesota
What is the Purpose of the SERU?

- Three major uses of the SERU Consortium design and survey products include the following:
  - ACADEMIC PROGRAM REVIEW: The SERU Survey provides a census and longitudinal data set providing a broad range of analysis including comparisons with equivalent academic programs at other Consortium campuses.
  - CAMPUS AND PROGRAM ASSESSMENT/ACCREDITATION: Provides ability to integrate SERU survey data with other campus data sets to identify effective programs and experiences to particular university strategic goals and missions.
  - ADDITIONAL REPORTS AND ANALYSIS: Data and analysis for internal and external reporting needs. The SERU Survey is also part of the new “voluntary System of Accountability” (VSA).
Participants

• Administered spring 2009 to 145,150 students at six large, public research universities

• Response rates varied from 26% to 69%: Overall response rate of 39.97% (n = 58,017)
## First-Year Students

<table>
<thead>
<tr>
<th>Variables</th>
<th>First-Years</th>
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<tbody>
<tr>
<td></td>
<td>n</td>
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<tr>
<td>Female</td>
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<tr>
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<td>Working Class</td>
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</table>
Variables

- **Sociodemographic & academic controls**
  - Gender, race, social class, ACT scores

- **Engagement factors**
  - Sense of belonging and satisfaction
  - Campus climate for personal characteristics
  - Academic initiative
  - Research experience
  - Collaborative work
  - Extracurricular involvement

- **Outcome factors**
  - First-semester gpa
  - Critical thinking and communication
  - Cultural appreciation and social awareness
  - Computer and research skills
  - Critical reasoning
  - Elevated academic effort
Engagement Results

• First-generation students had lower means ($p < .05$) on the following factors:
  – Sense of belonging and satisfaction
  – Academic initiative
  – Collaborative work
  – Extracurricular involvement
Outcomes Results

• First-generation students had lower means ($p < .05$) on the following factors:
  – Grade point average
  – Critical thinking and communication
  – Cultural appreciation and social awareness
## Regression Results

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<th></th>
<th>GPA</th>
<th>Critical Thinking and Communication Skills</th>
<th>Cultural Appreciation and Social Awareness</th>
<th>Computer and Research Skills</th>
<th>Critical Reasoning</th>
<th>Elevated Academic Effort</th>
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<td>Sense of Belonging</td>
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<td>Collaborative Work</td>
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| $R^2$                     | 16.75% | 25.05% | 24.25% | 10.14% | 25.69% | 24.1% |
Conclusion

- There are differences in engagement and outcomes between FG and NFG students
  - These differences are significant but have small effect sizes
- Among FG students, we find relationships between engagement factors and outcomes
Suggestions

• Learning communities
• Student-faculty interactions and research-oriented collaborations
• Collaborative efforts between faculty and staff
• Mentorship programs
References

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