

AN EXAMINATION OF INSTITUTIONAL PRACTICES SURROUNDING STUDENT RETENTION

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Grappling With Questions

The limits of current theories and research on student persistence provide the backdrop.

- How and to what extent do institutions organize themselves to promote student persistence?
- What institutional policies and practices are associated with improved student persistence outcomes?



Focal Points of Our Inquiry: Actionable Implications

- Understanding the role of campus policies and practices in improving student success outcomes
- Identifying actionable practices and policies
- Providing useful comparative data on policies and practices
- Beginning to explore whether and how policies and practices are associated with improved student outcomes



Literature on Institutional Role in Student Persistence

- Many have pointed to the importance of this question

(Braxton, 1999; Hossler, 2005; Perna & Thomas, 2006; Tinto & Pusser, 2006)

- Policy levers

- Work identifying pivotal practices

(Braxton, Hirschy, McClendon, 2004; Pascarella & Terenzini, 1991; Stage & Hossler, 2000)

- Directions identified through theory and research

(Braxton & McClendon, 2001-2002; Peterson, 1993)

- Empirical record remains uneven

(Patton, Morelon, Whitehead, & Hossler, 2006)

Educational Inequalities and Institutional Practice

National persistence rates for independent-status students are dramatically lower (51%) than for dependent students (85%) (Ryu, 2008).

- National persistence rates show notable gaps for independent-status students, students of color and low-income students
- Correlational studies of graduation rates risk reflecting broader inequalities without contributing to our understanding of institutional practice.
- New approaches, new outcomes needed

Utility of New Data



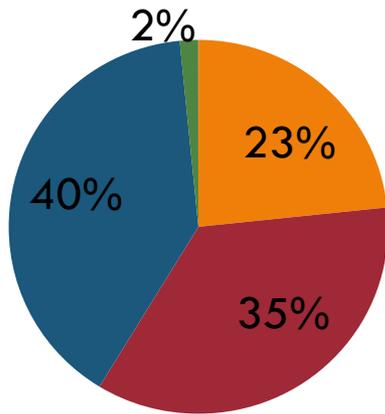
- The empirical base is still developing.
- In addition, comparative data are an important resource for institutions.
 - ▣ Recommendations from institutional policy-makers
- Outcomes need to be understood in context with inequities on a national scale
- This study contributes to explorations in these directions.

Survey of Institutional Retention Practices

2009:
Survey of
4-year
institutions
nation wide

- Web-based administration
 - ▣ 1484 institutions surveyed
 - ▣ Response rate of 30% (ca. 441 responding institutions)
- Findings focus on:
 - ▣ Coordination of Retention Efforts
 - ▣ Actionable Institutional Policies/Practices
 - Orientation
 - Academic Advising
 - Early Warning
 - Faculty-Student Interaction
 - Research and Assessment

Institutional Characteristics



■ Research ■ Masters ■ Baccalaureate ■ Other

□ Mean SAT (Critical Reading & Math) scores:

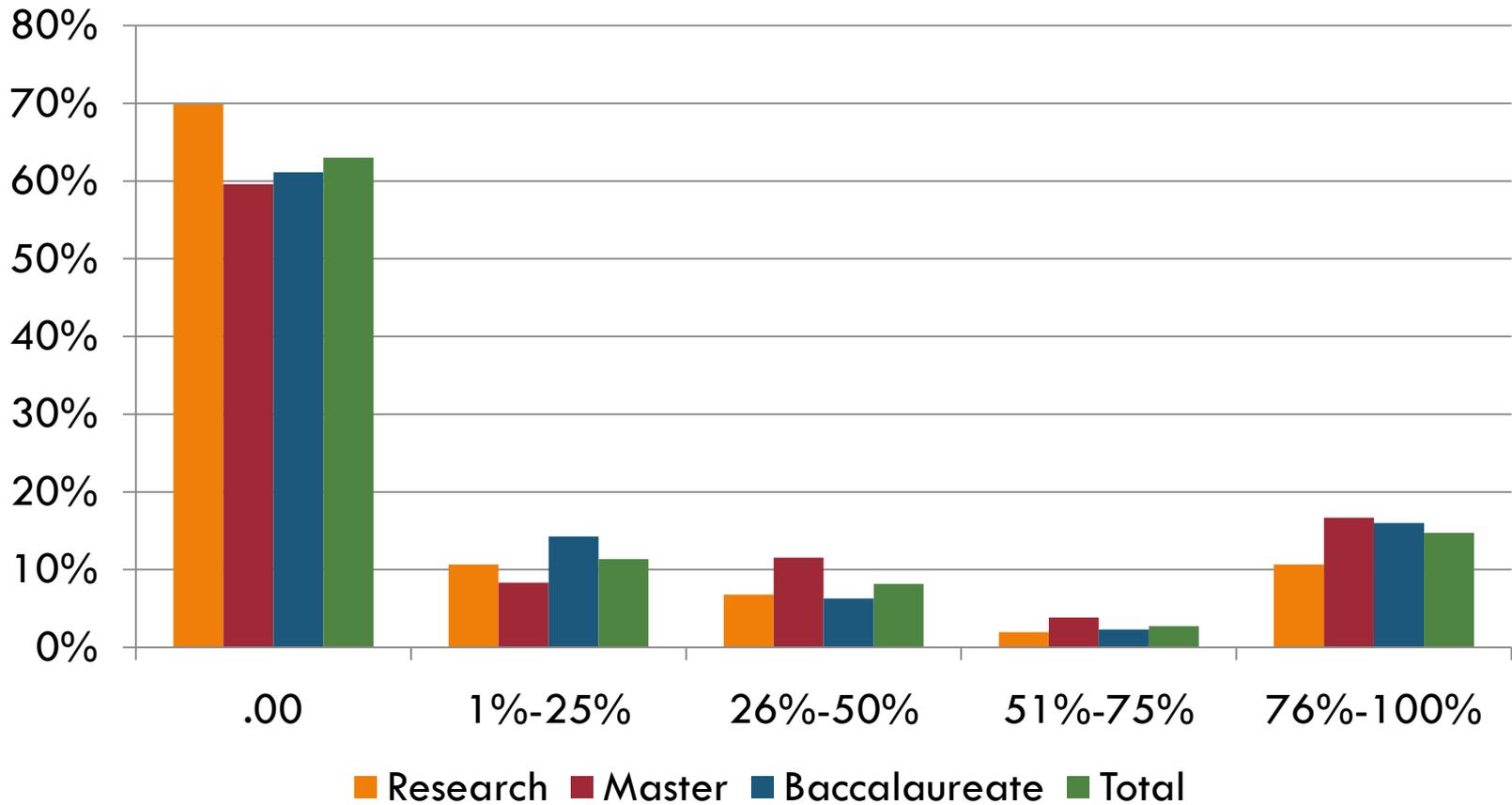
- 978 (25th percentile)
- 1196 (75th percentile)

- Mean scores on select variables
 - Fall-to-fall retention rate for first time 1st year students 75.73% (national mean =72.65%)
 - 40% of the institutions have a requirement for full-time, first-time degree/certificate-seeking students to live on campus
- Median revenue figures
 - Instructional expenses per FTE \$5,802
 - Tuition and fee revenues \$4,846/per FTE
 - Total revenue \$49,588,399

Coordination of Retention Efforts: Structures in Place

- 75 % reported having a retention coordinator
 - ▣ Based on two definitions
 - “an administrator charged with coordinating efforts”
 - “an administrator acting as a central resource”
 - Most reported that the position entails both functions
 - ▣ Mean FTE reported for the position was .35
- 62% reported having a retention committee
- 27% reported coordinating retention program to “a great extent”

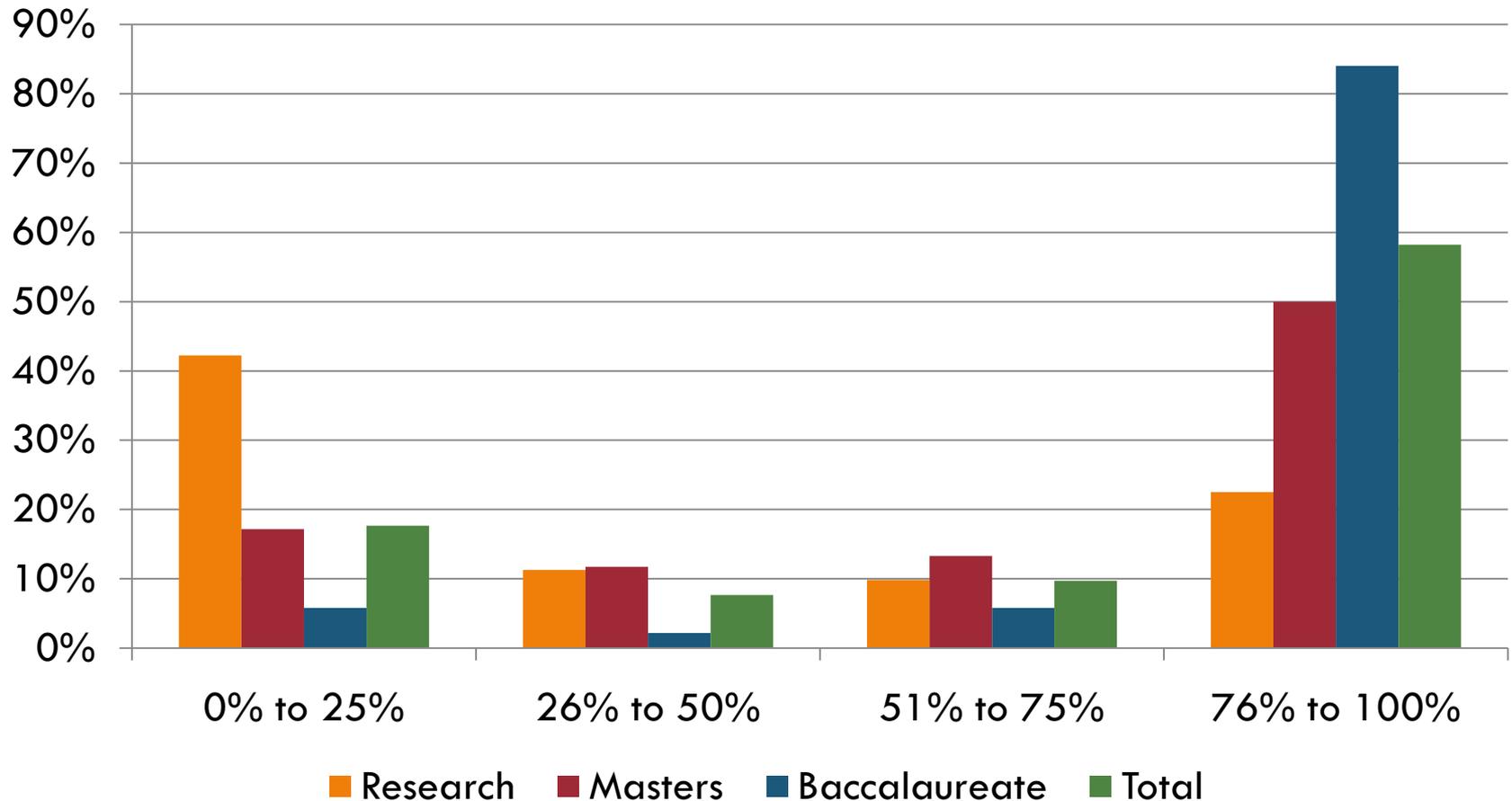
Percentage of an FTE Devoted to the “Retention Coordinator” Role



Policies for Early Warning

- 60% report they collect **mid-term grade** information for first-year students
- 58% report they ask faculty to complete **Early Alert** forms for first-year students
- 45% report they regularly flag specific courses with high percentages of **Ds, Fs, or Withdrawals**
- 39% report they offer voluntary weekly sessions to deepen student learning in courses with traditionally high D, F, & W rates.

Proportion of 1st Year Students Advised by Full-Time Faculty in the 2007-2008



Summary of Descriptive Findings

- Institutions are, in fact, organizing for retention.

However,...

- Resources (e.g. FTE, funding and programming authority) devoted to the enterprise may not be equal to the task.
 - Differences in structures across institutional type:
 - Research institutions rely on professional advisors more than faculty for advising first-year students
 - Research institutions show a lower FTE for retention coordinator positions, and emphasize committee efforts vs stronger coordination

Calculating Predicted Retention Rate

- An institution's retention rate may be a “misleading indicator of its capacity to retain students” (Astin, 1997, p. 648)
- More than half of the variance-explained in regression analyses of institutional retention rates is associated with differences in student background characteristics rather than by institutional practices (Astin, 1997)

Calculating Predicted Retention Rate (continued)

15

- Solution:
 - ▣ Calculate an predicted retention rate for each institution in the sample based on the characteristics of an institution's entering students
 - ▣ Compare the predicted retention rate with the actual retention rate (Astin, 1997; Engle & O'Brien, 2007; Muraskin & Lee, 2004)

Placing results in context: Method

OLS model variables:

- Institution Type (bacc., master's, research)
- % minority students
- SAT 75th percentile score
- %receiving federal grant aid
- % of students 25 and older

- Building on analyses conducted by the Pell Institute (Muraskin & Lee, 2004; Engle & O'Brien, 2007)
- Calculated predicted 1st-to-2nd-year retention rates, using OLS regression and controlling for institutional and student characteristics
- Identified institutions that had higher-than-predicted retention rates.

Calculating Predicted Retention Rate (continued)

17

Equation 1:

Institution's retention rate = $\alpha + \beta_1$ (research) + β_2 (master's) + β_3 (% minority students) + β_4 (% receiving federal grant aid) + β_5 (% students 25 and older) + ε .

Logistic regression model

Dependent variable:

Institution's actual retention rate is higher than its predicted retention rate

- ❑ An administrator coordinating efforts to improve student success
- ❑ Authority of the retention coordinator
- ❑ Availability of a formal, written plan at the institutional level
- ❑ Availability of full-semester length credit-bearing college adjustment course
- ❑ Institution flags courses with high % of Ds, Fs, or withdrawals
- ❑ Availability of academic support programs
- ❑ Extensiveness of structures to improve retention of students of color

Logistic Regression Results

19

Variables	Odds ratio	Sig
An administrator charged with coordinating efforts to improve student success	 .197	**
Authority of the retention coordinator	 1.505	*
Availability of a formal, written plan at the institutional level	.794	
Availability of an orientation program that extends through the first semester of classes	 .347	***
Institution flags courses with high % of Ds, Fs, or withdrawals	.615	
Availability of academic support programs	1.139	
Extensiveness of structures to improve retention of students of color	 1.510	**
Nagelkerke =.133		
N=188		
***p<0.01, **p<0.05, *p<.10		

Discussion and Future Research

20

Implications for future research

→ Multiple imputation of missing values

→ Multinomial regression

→ Two-stage modeling using IV (e.g. Alon, 2005)

- Analyses highlight issues for further exploration:
 - Missing data limiting the analyses
 - Conflating lower than predicted and those that are at or near predicted rates
 - Need for further exploration of climate and disaggregated outcomes (e.g. rates, MSI's)
 - May illuminate the range (and limits) of what institutional practices currently influence

Concluding Remarks

- Results may reflect the early stages of coordination and/or of institutional recognition that organization is needed.
 - ▣ Federal and State agencies are increasingly focused on outcomes, so we may see a trend emerge for institutions organizing further.
 - ▣ Economic factors causing families to consider value may also contribute to the continuation of a trend.
- The need to continue analyses that contextualize student outcomes and look carefully at the role of institutional policy and practice in student retention.
- The need for longitudinal research



Reports

22

□ Pilot Survey 2006

- Pilot Report available at www.collegeboard.com/retention

□ Survey 2009

- Report to be released at the College Board website in coming weeks

□ SCESS 2-year to be administered early 2011

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Presentation available via download:

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