



Engaging Minority Students: Different Patterns of Student Engagement and Impact on Student Success

Qin Zhang, Ph.D.
Institutional Research Analyst

Heather Kelly, Ed.D.
Director

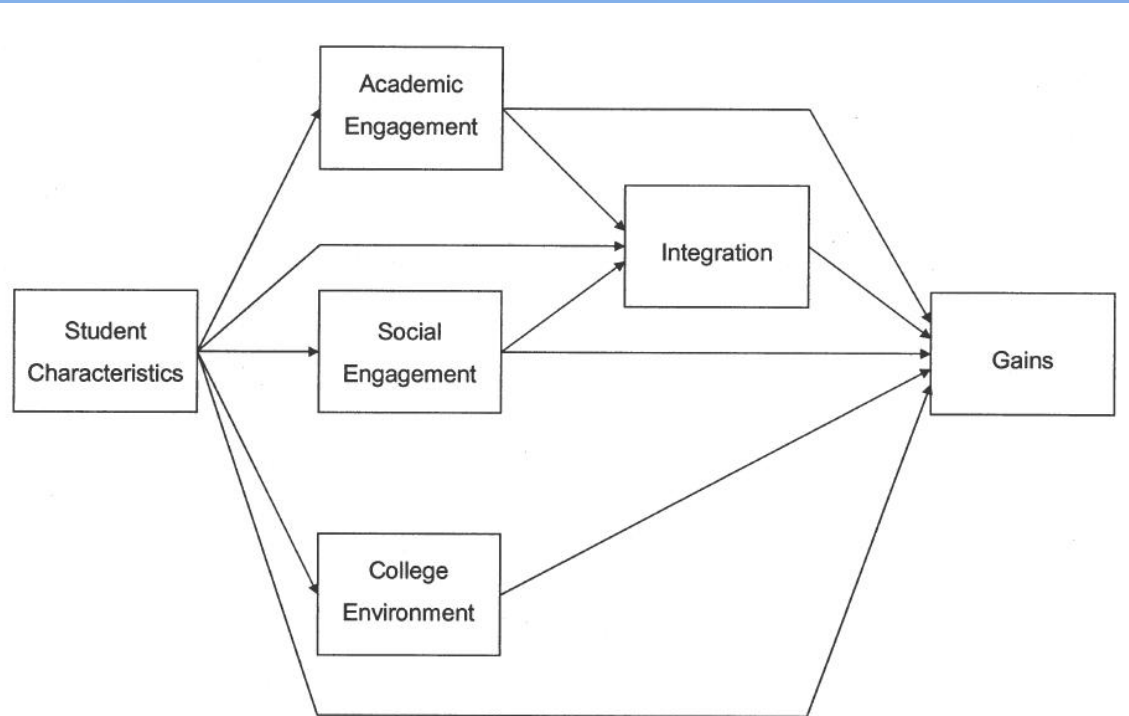
University of Delaware

- Located in suburban Newark, Delaware midway between Philadelphia and Baltimore
- Origins back to 1743, was chartered in 1833
- Public, State Assisted University



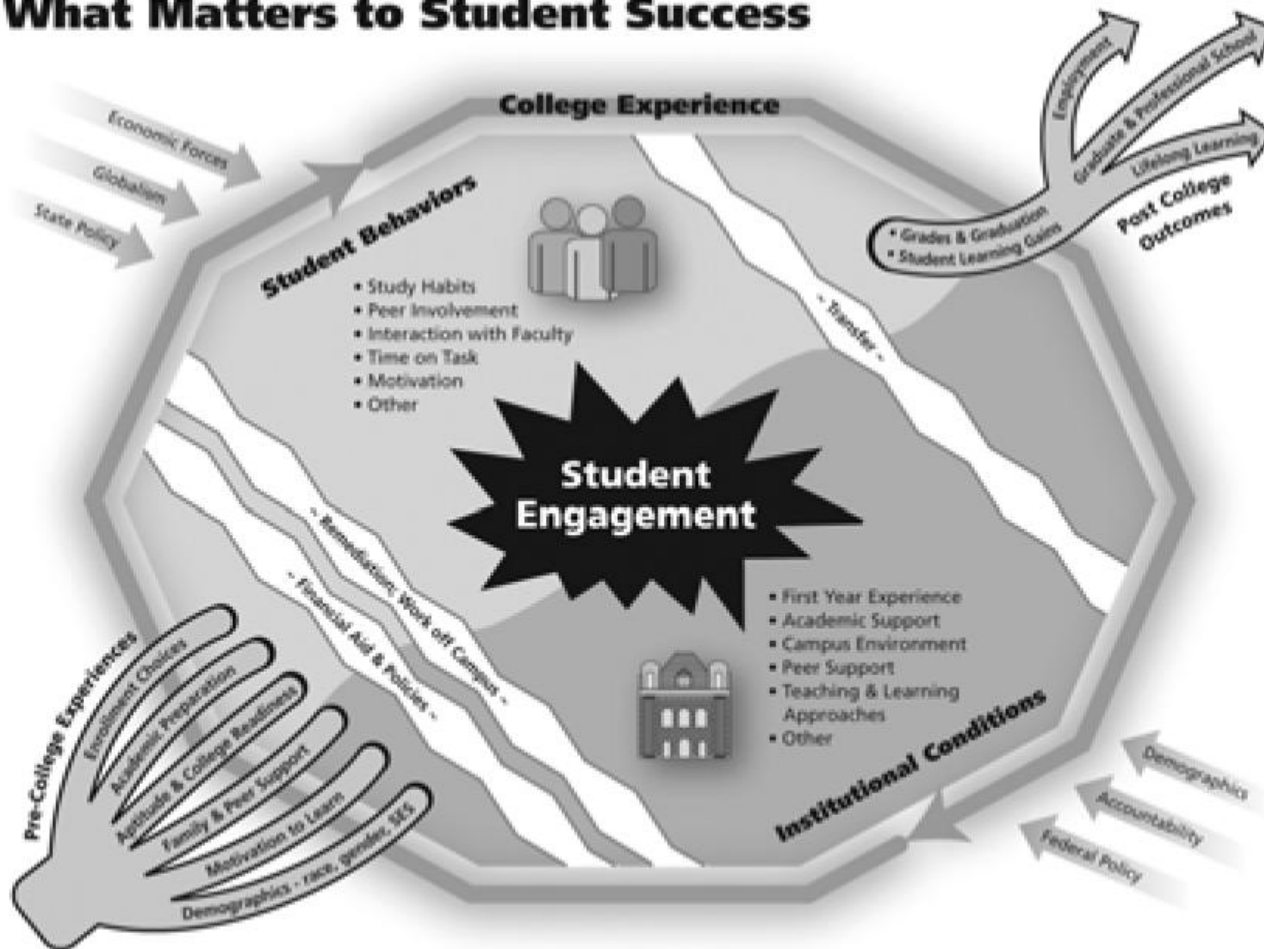
- Research University (very high research activity)
- UD offers 150 undergraduate and 173 graduate programs in 7 Colleges
- Fall 2011 Newark Campus enrollment totaled 16,340 undergraduate and 3,617 graduate students
- 1,131 full time faculty members of whom 858 are Tenured/Tenure Track (76%)
- On average, 92% of freshmen return sophomore year and more than 3 out of 4 students graduate in five years
- 92% of first-time freshmen and 44% of undergraduates live in university housing

[College Experience] Conceptual Model



Source: Pike, G. R., & Kuh, G. D. (May/June 2005). First- and Second-Generation College Students: A Comparison of Their Engagement and Intellectual. *The Journal of Higher Education*, 76(3), 276-300.

What Matters to Student Success



Source: Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006, July). *What matters to student success: A review of the literature*. Washington, DC: National Postsecondary Education Cooperative.

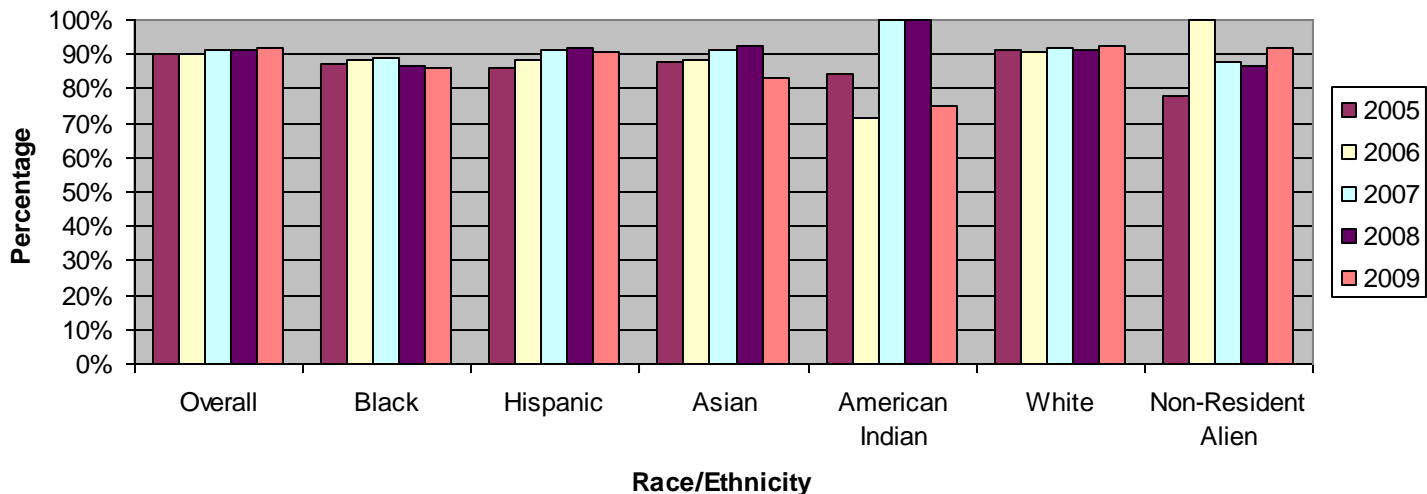
Why the Concern?

What does the literature tell us?

- Enrollment and persistence rates of African American, Latino, and Native American students continue to lag behind White and Asian students. These rates for Latino students also trail all other ethnic groups.
- NSSE and CCSSE studies indicate students regardless of race and ethnicity engage in effective educational practices at comparable levels. Here are some exceptions:
 - Asian Pacific Americans and African Americans are somewhat more likely to take part in enriching educational experiences than their peers.
 - African Americans report more active and collaborative learning activities; Asian Pacific Americans are the least engaged in this area.
 - Latinos/as and Whites are the two groups most satisfied with their college experience; African American students are generally least satisfied (NSSE 2005).

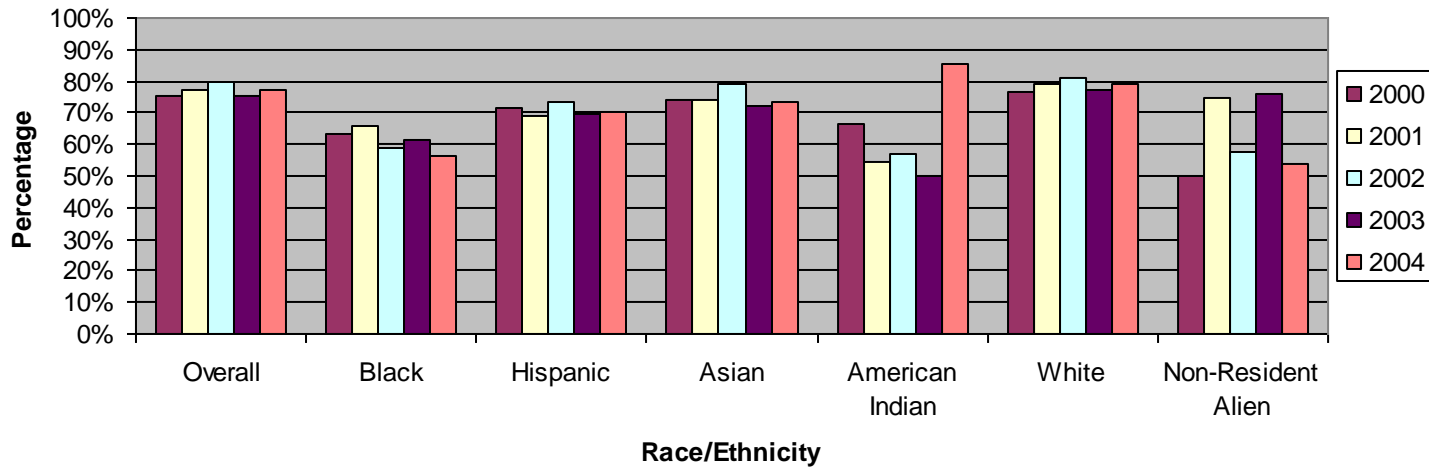
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Second Year Retention Rates for Entering First-time, Full-time Freshmen



Race/Ethnicity	2005	2006	2007	2008	2009
Overall	90.3%	90.4%	91.4%	91.2%	92.0%
Black	87.0%	88.4%	89.2%	86.8%	86.2%
Hispanic	85.8%	88.4%	91.4%	91.8%	90.6%
Asian	87.7%	88.6%	91.0%	92.7%	82.9%
American Indian	84.2%	71.4%	100.0%	100.0%	75.0%
White	91.0%	90.6%	91.8%	91.4%	92.3%
Non-Resident Alien	77.8%	100.0%	87.9%	86.4%	91.9%

Six-Year Graduation Rates for Entering First-time, Full-time Freshmen



Race/Ethnicity	2000	2001	2002	2003	2004
Overall	75.6%	77.5%	79.5%	75.3%	77.1%
Black	63.3%	65.8%	58.9%	61.6%	56.3%
Hispanic	71.3%	68.9%	73.4%	69.7%	70.5%
Asian	74.3%	73.8%	79.2%	72.2%	73.7%
American Indian	66.7%	54.5%	57.1%	50.0%	85.7%
White	76.7%	78.8%	81.1%	76.9%	79.2%
Non-Resident Alien	50.0%	75.0%	57.9%	76.2%	53.8%

What is Our Goal?

- Increase enrollment and persistence trends for underrepresented minorities (African-American, Hispanic, and American Indian).
- Provide an environment where all students have a positive college experience and succeed.

Research Questions

- In this predominantly white undergraduate population, do minority students have same level of educational engagement compared with their white peers?
- How does student ethnic background, in combination with student involvement in various educational activities, shape student outcomes?

Data Source = NSSE

Why NSSE?

- National data collection directed at measuring the extent to which students are engaged with faculty, with each other, and with their studies.
- Examines the extent to which they read and write, make use of technology, engage in a broad range of learning activities, and are satisfied with their college experience.
- NSSE is typically administered to freshmen and seniors to assess differences in level of engagement between the first and fourth year of college.

Methodology

- Student responses to the 2008 NSSE administration matched with UDSIS student data
- 1,269 students completed survey, including 649 freshmen and 620 senior students (32% overall response rate; 33% freshmen and 31% senior))
- Freshmen and senior student responses are analyzed separately

Student Demographics Fall 2008

Degree-seeking Undergraduates
(include first-time first-year)

NSSE Response Patterns

<i>Race/Ethnicity</i>	Count	Percentage
American Indian or Alaska Native	48	0%
Asian or Pacific Islander	688	4%
Black, non-Hispanic	817	5%
White, non-Hispanic	12,376	80%
Hispanic	821	5%
Nonresident aliens	171	1%
Race/ethnicity unknown	486	3%
Total	15,407	100%

<i>Race/Ethnicity</i>	UD		Research - High Activity		Actual-Aspire Peers	
	Freshmen	Seniors	Freshmen	Seniors	Freshmen	Seniors
Native American	0%	0%	1%	0%	0%	0%
Asian/Pacific Islander	4%	4%	12%	10%	11%	9%
Black/African American	4%	2%	5%	4%	4%	4%
White, Non-Hispanic	78%	82%	70%	72%	71%	73%
Mexican/Mexican-American	1%	0%	1%	1%	1%	1%
Puerto Rican	1%	0%	1%	0%	1%	1%
Other Hispanic or Latino	3%	2%	3%	2%	2%	2%
Multiracial	2%	2%	3%	3%	2%	2%
Other	1%	1%	1%	1%	1%	1%
I Prefer Not To Respond	6%	5%	5%	6%	5%	6%

Variable Specification

- Indicators of student success: cumulative GPA in Spring 2008 and first-year retention (freshmen retained in Fall 2008)
- Measures of Engagement: Five NSSE Benchmarks of Effective Educational Practices
 - Level of Academic Challenge
 - Active and Collaborative Learning
 - Student-Faculty Interaction
 - Enriching Educational Experiences
 - Supportive Campus Environment

Variable Specification (continued)

- Ethnicity: URM (African-American, Hispanic, and American Indian); Asian; Other; and White (as base category)
- Other demographic control variables
 - gender
 - total SAT score
 - full-time versus part-time status
 - on-campus living versus commuter status

Data Analyses

- First Stage: Multiple Linear Regression
 - Dependent variable: NSSE benchmarks
- Second Stage: Multiple Linear regression
 - Dependent variable: cumulative GPA
- Third Stage: Logistic Regression
 - Dependent variable: retention (1: retained; 0: not retained)

Results (1)

- See Table 1
- URM students, both freshmen and seniors, were generally equally engaged in effective educational activities as their white peers.
- Asian seniors showed a significant higher level of engagement in student-faculty interaction.
- “Other” freshmen reported significant lower scores in four engagement areas: Level of Academic Challenge; Active and Collaborative Learning; Student-Faculty Interaction; and Supportive Campus Environment

Results (2)

- See Table 2
- Freshmen:
 - active and collaborative learning and enriching educational experiences had positive association with GPA
 - URM and Asian students associated with lower GPA compared with their white peers
 - SAT and female positively associated with GPA

Results (3)

- See Table 2
- Seniors:
 - Supportive campus environment had positive association with GPA
 - Ethnicity no longer contributed to GPA
 - SAT and female still positively associated with GPA
 - Living on campus and being full-time associated with higher GPA

Results (4)

- See Tables 3 and 4
- Freshmen who are more engaged in active and collaborative learning activities more likely to be retained
- Freshmen who are more engaged in enriching educational experiences less likely to be retained
- Freshmen in a more supportive campus environment more likely to be retained
- Freshmen with higher GPA more likely to be retained
- The odds of being retained decreases with the increase of GPA among Asian students

Limitations

- Concern with reliability of NSSE benchmarks
- One institution sample, can not generalize
- Limited sample size of minority students
- Very high freshman retention rate

Next Steps

- Develop alternative groupings of NSSE items
- Fit new models based on the alternative engagement measures
- Build a retention prediction model based on these findings
- Establishing an Undergraduate Student Retention Task Force with focus on diversity and STEM disciplines

UD NSSE Web Portal

Office of Institutional Research

Reports, Surveys, and Studies

Academic Benchmarking (authorized access only)

Career Plans

Economic Impact

Exit Survey of Graduating Students

Grade Distributions

National Survey of Student Engagement (authorized access only)

Complete Listing

National Survey of Student Engagement - NSSE 2008

University of Delaware Analysis:

[Narrative](#)
[Mean Score Tables](#)
[Frequency Tables](#)

University of Delaware Rank Order Analysis:

[Narrative](#)
[Mean Score and Rank Tables](#)

University of Delaware Multi-year Analysis (2001, 2005, 2008):

[Narrative](#)
[Mean Score Tables by Gender and Ethnicity](#)
[Mean Score Tables](#)

NSSE Reports for the University of Delaware:

[Mean and Frequency Reports](#)
[Benchmark Comparison Report](#)
[Multi-Year Benchmark Report](#)

NSSE Survey Instrument:

[NSSE Paper Version](#)
[NSSE Web Version](#)

George Kuh Presentation & Materials:

[Plenary Session](#)
[UD Benchmark Comparisons](#)
[Benchmarking of Effective Educational Practice](#)
[A Long Shot of What Matters to Student Success](#)
[Institutional Assessment Template](#)
[High Impact Practices](#)
[UD NSSE Variables Worth Noting](#)

Faculty Survey of Student Engagement - FSSE 2008

University of Delaware Analysis:

[Narrative](#)
[Analysis](#)

FSSE Survey Instrument:

[FSSE Web Version](#)

Questions? Contact irp@udel.edu

For further information:

National Survey of Student Engagement
 Faculty Survey of Student Engagement

Updated: September 2009



Discussion Questions

- What does the “other” race/ethnicity category mean?
- Which variables do you use to predict student retention and success?
- Is *satisfaction* an outcome or predictor? Or both?

Contact Us...

Qin Zhang

Institutional Research Analyst

302.831.2021

qzhang@udel.edu

Heather Kelly

Director

302.831.2021

hkelly@udel.edu



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