Using Data and Analytics to Eliminate Equity Gaps

Timothy M. Renick, Ph.D.
Executive Director, National Institute for Student Success
Georgia State University
The Challenge in Front of Us

Baccalaureate Degree Attainment by Age 24 by Family Income Quartile

- Top Income Quartile: 82.4%
- Third Income Quartile: 36.1%
- Second Income Quartile: 16.5%
- Bottom Income Quartile: 8.3%

Changing Demographics

PERCENT OF LOW INCOME STUDENTS IN U.S. PUBLIC SCHOOLS 2013

National Average: 51%

SOUTHERN EDUCATION FOUNDATION | SOUTHERNEDUCATION.ORG

Data Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data
36,000 Students on the Atlanta campus
2016 consolidation with Perimeter College adds 5 community college campuses and 18,000 students
Graduation Rates by Race & Ethnicity

Where we were: 2003

- White: 31.6%
- African American: 25.6%
- Hispanic: 22%
Changing Demographics: Race & Ethnicity

Minorities

- Fall 2008: 53%
- Fall 2009: 54%
- Fall 2010: 56%
- Fall 2011: 59%
- Fall 2012: 60%
- Fall 2013: 63%
- Fall 2014: 65%
- Fall 2015: 66%
- Fall 2016: 67%
- Fall 2017: 71%
- Fall 2018: 74%
Low-Income Students

Percent of Georgia State Undergraduates on PELL

- Fall 2007: 31%
- Fall 2008: 32%
- Fall 2009: 40%
- Fall 2010: 48%
- Fall 2011: 51%
- Fall 2012: 56%
- Fall 2013: 58%
- Fall 2014: 59%
- Fall 2015: 59%
- Fall 2016: 59%
- Fall 2017: 59%
SAT SCORES

-33 points
Appropriations Cuts

-$40 million
Are We the Problem?
19%
Percent of Confirmed Freshmen Who Did Not Enroll Summer 2015
Summer Melt

Fall 2015

Confirmed GSU Freshman Who Never Attended Any College: 278

Non-white 76%
First Generation 45%
Low Income 71%
Avg. High School GPA 3.34
The Hidden Obstacles to Enrollment

- Federal Financial Aid Application
- Verification Request
- State of Georgia Immunization Proof
- Taking Placement Exams
- Registering for Classes
A.I.-enhanced Chatbot: 24/7 Help

Which parent do I use on the FAFSA?
Jan 19 2017 6:38:13 PM

For info on which parent's information to use on the FAFSA, reply with the option that best describes your parents' marital status: Never Married Unmarried and both parents living together Married Remarried Divorced/Separated Widow. If none of these options are applicable, check out: usa.gov/10gfTcg

Divorced
Jan 19 2017 6:38:40 PM

If your parents are divorced, the custodial parent (or the one you lived with the most in the past 12 months) is usually responsible for filling out the FAFSA. Check this website to learn more: usa.gov/10gfTcg

OK and when is it due?
Jan 19 2017 6:39:07 PM

The FAFSA is available starting Oct. 1. Fill it out ASAP! (Use last year’s tax info.) Some aid is first-come, first-served, so don’t delay! fafsa.gov
Drop in Summer Melt:

-37%

365 More Students Enrolled
Pilot: Continuing Students
Supported by the Dell and ECMC Foundations

Students who started the semester with a balance: -49%

Students with Account Balance Who Opened a ticket with Financial Aid: +33%

Student meeting with Advisor within one week of being contacted: +28.5%
Average Number of Majors Cycled Through By Graduating Seniors in 2010

2.6
Overwhelming Choices

LOST

CONFUSED

UNCWORKED

UNCLEAR

PERPLEXED

DISORIENTED

BEWILDERED
Freshman Learning Communities & Meta Majors

Freshman Learning Communities with block schedules of 5 to 6 courses:
95% of non-Honors freshmen (Opt-out model)

1st Year GPA

<table>
<thead>
<tr>
<th></th>
<th>No FLC</th>
<th>FLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>2.73</td>
<td>2.96</td>
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Retention

<table>
<thead>
<tr>
<th></th>
<th>No FLC</th>
<th>FLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>81%</td>
<td>85%</td>
</tr>
</tbody>
</table>
Choice Architecture: Meta Majors

Business
Education
Exploratory
STEM
Humanities & Arts
Health Professions
Policy/Social Science
Top Employers of GSU Political Science Grads: Average Salary

- Home Depot
- Gwinnett Public Schools
- Atlanta Public Schools
- Apple
- Georgia-Pacific
- UPS

What does a career path look like for this Major?

Log in to Steppingblocks for more national data on Political Science majors.
Faculty and Department Seed Grants

The Department of History
Skills-Based Approach to U.S. History Survey Courses

- Use Tableau to interpret historical data
- Data viz software as tool for presenting historical findings
- Did NOT require any alteration to existing SLOs
Drop in Major Changes After the Freshman Year

-32%
Number of Fully Registered Students Being Dropped Each Semester for Non-Payment in 2010-2011
Financial Stop Outs: 2011

30% eventually graduate

Many with small balances, $300 or less

Seniors at greatest risk
Panther Retention Grants

**Average Grant:** $900

Graduated: 86.5%

Grant Recipients
Graduated This Year: 1,321
Panther Retention Grants

19,000+

Grants awarded since 2011
5,760
Students Who Dropped Out of Georgia State in 2010
Advisement: GPS Advising

Predictive Analytics Project with EAB

10 YEARS OF DATA | 2.5 MILLION GRADES
144,000 STUDENT RECORDS | 800+ ANALYTICS-BASED ALERTS
30,000 STUDENTS TRACKED DAILY
Registration Tracking and Academic Maps

### B.S. in Chemistry

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
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<tbody>
<tr>
<td>• Complete 1 of ENGL 1101, ENGL 1102 or ENGL 1103 (C or Better)</td>
<td>• Complete ENGL 1102 or 1103 (C or Better)</td>
</tr>
<tr>
<td>• Complete MATH 1113 or Higher (B- or Better)</td>
<td>• Complete MATH 2211 or Higher (B- or Better)</td>
</tr>
<tr>
<td>• Complete CHEM 1211K (B- or Better)</td>
<td>• Complete CHEM 1212K (B- or Better)</td>
</tr>
<tr>
<td></td>
<td>• Maintain a cumulative GPA of 2.25 or Better</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER 3</th>
<th>SEMESTER 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Complete CHEM 2400 (B- or Better)</td>
<td>• Complete CHEM 3410 (C or better)</td>
</tr>
<tr>
<td>• Complete MATH 2212 (C or better)</td>
<td>• PHY 2212k (B- or Better) (C or better)</td>
</tr>
<tr>
<td>• Complete PHY 2211k (C or better)</td>
<td>• Maintain a cumulative GPA of 2.25 or Better</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>SEMESTER 5</th>
<th>SEMESTER 6</th>
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<tbody>
<tr>
<td>• Complete CHEM 4000 with a C or Better</td>
<td>• Complete CHEM 4010 with a C or Better</td>
</tr>
<tr>
<td>• Complete CHEM 4110 with a C or Better</td>
<td>• Complete CHEM 4120 with a C or Better</td>
</tr>
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<table>
<thead>
<tr>
<th>SEMESTER 7</th>
<th>SEMESTER 8</th>
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<tbody>
<tr>
<td>• Complete CHEM 4160 with a B- or better</td>
<td>• Complete CHEM 4190 with a C or Better</td>
</tr>
</tbody>
</table>
Performance in ‘Marker’ Courses

Graduation Rate in Major by Introductory Course Grade

**Introduction to Chemistry**  
Natural Science majors

- A: 70.0%
- B: 66.7%
- C: 39.5%
- D/F: 8.3%

**Comparative Politics**  
Political Science majors

- A: 81.8%
- B: 73.9%
- C: 25.0%
- D/F: 6.2%

**Music Theory I**  
Music majors

- A: 66.7%
- B: 55.5%
- C: 12.5%
- D/F: 0.0%
Course Engagement

Unique Students

Date


10696 10413 11360 13343 13263 13110 13549 10608 5461 14728 14613 15122 15167 16072 14923 16903 24571 22970 22766
Advising Meetings Annually

91,000
Results: Increased Retention

Increased Average First Term Retention
Fall to Spring Retention

- Fall 2010: 83.4%
- Fall 2011: 84.6%
- Fall 2012: 87.9%
- Fall 2013: 89.0%
Results: Decline in Time to Degree

Credit Hours at Completion: All Bachelors Students

- 2009-10: 140
- 2010-11: 140
- 2011-12: 141
- 2012-13: 141
- 2013-14: 138
- 2014-15: 135
- 2015-16: 133
ROI for Students

$18 million

Savings to the Class of 2019 in tuition and fees when compared to the Class of 2012
Confounding Expectations

STEM Degrees Conferred Since 2011 (with enrollment change)

Black +154% (50%)
Black Male +208% (54%)
Hispanic +324% (118%)
Impacts
Growing Recognition
The Cost of Inaction

The Calculus of Student Success: ROI

1-point increase in retention = 340 students

Average student tuition & fees annually/student = $9,800

ROI for each 1-point increase = $3.32 million/year
Georgia State Undergraduate Degrees Awarded

2010-11: 4,222
2019-20: 7,723

INCREASE: 3,501 (+83%)
<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2019-2020</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>1,001</td>
<td>2,199</td>
<td>+1,198</td>
<td>+120%</td>
</tr>
<tr>
<td>Pell</td>
<td>1,298</td>
<td>3,554</td>
<td>+2,256</td>
<td>+174%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>196</td>
<td>632</td>
<td>+436</td>
<td>+222%</td>
</tr>
</tbody>
</table>
Graduation Rates by Race & Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2003</th>
<th>Today</th>
<th>Today, with Clearinghouse Data Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>32%</td>
<td>50%</td>
<td>78%</td>
</tr>
<tr>
<td>African American</td>
<td>26%</td>
<td>58%</td>
<td>78%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>22%</td>
<td>57%</td>
<td>81%</td>
</tr>
</tbody>
</table>
#1 in Degrees Conferred to African Americans

**Top 100 Degree Producers: Non-Profit Universities**

2018 African-American Bachelor's - All Disciplines Combined

<table>
<thead>
<tr>
<th>Institutions</th>
<th>State</th>
<th>Total</th>
<th>%Grads</th>
<th>%Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia State University</td>
<td>GA</td>
<td>1,930</td>
<td>38%</td>
<td>7%</td>
</tr>
<tr>
<td>FAMU</td>
<td>FL</td>
<td>1,477</td>
<td>95%</td>
<td>-7%</td>
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<tr>
<td>University of Central Florida</td>
<td>FL</td>
<td>1,401</td>
<td>24%</td>
<td>-1%</td>
</tr>
<tr>
<td>University of Maryland-University College</td>
<td>MD</td>
<td>1,443</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Howard University</td>
<td>D.C.</td>
<td>1,194</td>
<td>78%</td>
<td>0%</td>
</tr>
<tr>
<td>North Carolina A &amp; T State University</td>
<td>NC</td>
<td>1,227</td>
<td>91%</td>
<td>6%</td>
</tr>
<tr>
<td>Florida International University</td>
<td>FL</td>
<td>1,087</td>
<td>19%</td>
<td>7%</td>
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<tr>
<td>Florida Atlantic University</td>
<td>FL</td>
<td>1,054</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>University of Memphis</td>
<td>TN</td>
<td>1,011</td>
<td>33%</td>
<td>3%</td>
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<tr>
<td>The University of Texas at Arlington</td>
<td>TX</td>
<td>992</td>
<td>13%</td>
<td>-7%</td>
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Source: *Diverse Issues in Higher Education, 2018*
Social Mobility

- Brookings Institution
- Harvard CLIMB
- US News and World Report

Top 1% of American Universities

Moving Students from the bottom 20% of Americans by Annual Household Income to the Upper 50% fifteen years later.
Perimeter College 3-Year Graduation Rates

2019 Completed, Transferred, Still Enrolled: 83%*

*Chronicle of Higher Education, January 2020
## Perimeter College Graduation Rates: Equity

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2020</th>
<th>Change</th>
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<tbody>
<tr>
<td>Overall</td>
<td>7%</td>
<td>22%</td>
<td>+15</td>
</tr>
<tr>
<td>White</td>
<td>10%</td>
<td>22%</td>
<td>+12</td>
</tr>
<tr>
<td>African American</td>
<td>4%</td>
<td>22%</td>
<td>+18</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>25%</td>
<td>+19</td>
</tr>
<tr>
<td>Pell</td>
<td>5%</td>
<td>22%</td>
<td>+17</td>
</tr>
</tbody>
</table>

* IPEDS 3-Year Graduation Rates for Associate Degree Students