The Challenge in Front of Us

Baccalaureate Degree Attainment by Age 24 by Family Income Quartile

- Top Income Quartile: 82.4%
- Third Income Quartile: 70.4%
- Second Income Quartile: 58.3%
- Bottom Income Quartile: 30.2%


Changing Demographics

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

Table summarizing the percent of low income students in U.S. public schools by state, with data from 2013.
34,000 Students on the Atlanta campus (Research 1)
53,000+ Students as of 2016 with Perimeter College consolidation
Graduation Rates by Race & Ethnicity

Where we were: 2003

- **WHITE**: 31.6%
- **AFRICAN AMERICAN**: 25.6%
- **HISPANIC**: 22%

Changing Demographics: Race & Ethnicity

- **Minorities**:
  - Fall 2007: 53%
  - Fall 2008: 54%
  - Fall 2009: 56%
  - Fall 2010: 60%
  - Fall 2011: 63%
  - Fall 2012: 65%
  - Fall 2013: 66%
  - Fall 2014: 67%
  - Fall 2015: 69%
  - Fall 2016: 71%

Low-Income Students

- **Percent of Georgia State Undergraduates on Pell**:
  - Fall 2007: 31%
  - Fall 2008: 33%
  - Fall 2009: 40%
  - Fall 2010: 45%
  - Fall 2011: 54%
  - Fall 2012: 58%
  - Fall 2013: 59%
  - Fall 2014: 59%
  - Fall 2015: 59%
  - Fall 2016: 59%
  - Fall 2017: 59%
SAT SCORES
-33 points

FORECLOSURE
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
Personalized Interactions Before Enrollment

Portal to Guide Students Through Next Steps

24/7 Responses Using a Chatbot on Smart Devices
201,000

Three-Year Drop in Summer Melt: 37%

+362 Students per year

2.6

Average Number of Majors Cycled Through By Graduating Seniors in 2010
Freshman Learning Communities & Meta Majors

Choice Architecture: Meta Majors

Business
Education
Exploratory
STEM
Humanities & Arts
Health Professions
Policy/Social Science
Academic Guides with Live Job Data

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
Meetings of Pre-Seniors with Career Counselors

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>685%</td>
<td>809</td>
<td>6,355</td>
</tr>
<tr>
<td>3-year increase</td>
<td>3-year increase</td>
<td></td>
</tr>
</tbody>
</table>

-32%

Drop in Major Changes After the Freshman Year

43%

Percent of Students Receiving Non-Passing Grades in Introductory Math Courses in 2008
### Strengthening Math Pathways

**Pre-Calculus, College Algebra, Intro to Statistics**

- DFW Prior to Change: 43%
  - DFW Today: 28% (35% drop)
- Number of Students enrolled in courses taught through the MILE, 2017-18: 8,500

**+1,275 Students Passing**

### Adaptive Learning at Scale

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Students</th>
<th>Sections</th>
<th>DFW</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 1101</td>
<td>American Government</td>
<td>6294</td>
<td>65</td>
<td>16.3%</td>
</tr>
<tr>
<td>MATH 1113</td>
<td>College Algebra</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON 2105</td>
<td>Principle of Macroeconomics</td>
<td>2140</td>
<td>56</td>
<td>19.2%</td>
</tr>
<tr>
<td>PSYC 1101</td>
<td>Introduction to General Psychology</td>
<td>2552</td>
<td>36</td>
<td>31.6%</td>
</tr>
<tr>
<td>POLS 2401</td>
<td>Global Issues</td>
<td>2230</td>
<td>35</td>
<td>18.9%</td>
</tr>
<tr>
<td>FAM 2700</td>
<td>History of the Motion Picture</td>
<td>2226</td>
<td>39</td>
<td>15.2%</td>
</tr>
<tr>
<td>ECON 2106</td>
<td>Principles of Microeconomics</td>
<td>2313</td>
<td>31</td>
<td>24.7%</td>
</tr>
<tr>
<td>MATH 1110</td>
<td>Introduction to Mathematical Modelling</td>
<td>2072</td>
<td>35</td>
<td>26.5%</td>
</tr>
<tr>
<td>MATH 1111</td>
<td>College Algebra</td>
<td>1540</td>
<td>45</td>
<td>30.2%</td>
</tr>
<tr>
<td>SOC 1101</td>
<td>Introductory Sociology</td>
<td>1432</td>
<td>39</td>
<td>20.2%</td>
</tr>
<tr>
<td>MATH 1112</td>
<td>Pre-calculus</td>
<td>1289</td>
<td>34</td>
<td>27.4%</td>
</tr>
<tr>
<td>CHEM 1111</td>
<td>Principles of Chemistry I</td>
<td>1096</td>
<td>37</td>
<td>17.2%</td>
</tr>
<tr>
<td>BIOL 1103</td>
<td>Introductory Biology I</td>
<td>1051</td>
<td>40</td>
<td>24.8%</td>
</tr>
</tbody>
</table>

### Eliminating Bottlenecks: Peer Tutors

| Course GPA | No SI: 2.41 |
| No SI: 2.91 |

| One-Year Retention | No SI: 83.5% |
| No SI: 91.2% |

| Students: 9,700 |
1,000+
Number of Fully Registered Students Being Dropped Each Semester for Non-Payment in 2010-2011

< 30%
Likelihood that a college student who stops out for financial reasons will ever complete degree at the institution

Who were we dropping

• Seniors
• Academically on track
• Balance below $1,500
Panther Retention Grants

AVERAGE GRANT $900

Graduated: 86.5%
Grant Recipients Graduated 2016-17: 1,321

14,000 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  800+ ANALYTICS-BASED ALERTS
144,000 STUDENT RECORDS  30,000 STUDENTS TRACKED DAILY

Registration Tracking and Academic Maps

B.S. in Chemistry

SEMESTER 1
- Complete 1 of ENGL 1101, ENGL 1102 or ENGL 1103 (C or Better)
- Complete MATH 1113 or Higher (B- or Better)
- Complete CHEM 1211K (B- or Better)

SEMESTER 2
- Complete ENGL 1102 or 1103 (C or Better)
- Complete MATH 2211 or Higher (B- or Better)
- Complete CHEM 1212K (B- or Better)
- Maintain a cumulative GPA of 2.25 or Better

SEMESTER 3
- Complete CHEM 2400 (B- or Better)
- Complete MATH 2212 (C or Better)
- Complete PHY 2211K (C or Better)

SEMESTER 4
- Complete CHEM 3410 (C or Better)
- Complete CHEM 4000 with a C or Better
- Complete CHEM 4110 with a C or Better
- Complete CHEM 4010 with a C or Better
- Complete CHEM 4120 with a C or Better
- Maintain a cumulative GPA of 2.25 or Better

SEMESTER 5
- Complete CHEM 4160 with a B- or better
- Complete CHEM 4190 with a C or Better

Performance in ‘Marker’ Courses

Graduation Rate in Major by Introductory Course Grade

<table>
<thead>
<tr>
<th>Course</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D/F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Chemistry</td>
<td>73.0%</td>
<td>66.7%</td>
<td>33.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Comparative Politics</td>
<td>73.9%</td>
<td>66.7%</td>
<td>33.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Musical Theory I</td>
<td>66.7%</td>
<td>50.0%</td>
<td>12.5%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Results: Increased Retention

Increased Average First Term Retention
Fall to Spring Retention

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2010</td>
<td>83.4%</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>84.6%</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>87.9%</td>
</tr>
<tr>
<td>Fall 2013</td>
<td>89.0%</td>
</tr>
</tbody>
</table>

Results: Decline in Time to Degree

Credit Hours at Completion: All Bachelors Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-10</td>
<td>140</td>
</tr>
<tr>
<td>2010-11</td>
<td>141</td>
</tr>
<tr>
<td>2011-12</td>
<td>141</td>
</tr>
<tr>
<td>2012-13</td>
<td>138</td>
</tr>
<tr>
<td>2013-14</td>
<td>135</td>
</tr>
<tr>
<td>2014-15</td>
<td>133</td>
</tr>
<tr>
<td>2015-16</td>
<td>133</td>
</tr>
</tbody>
</table>
$18 million
Savings to the Class of 2018 in tuition and fees when compared to the Class of 2012

STEM Degrees Awarded Since 2011
(compared to gains in enrollment)

African American  +114%  (14N)
African Am Male    +153%  (15N)
Hispanic          +275%  (24N)

Impacts
The Calculus of Student Success: ROI

1-point increase in retention = 325 students

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

ROI for each 1-point increase = $3.18 million/year

The Cost of Inaction

Georgia State Undergraduate Degrees Awarded

Bachelor's Degrees Awarded Annually

<table>
<thead>
<tr>
<th></th>
<th>2010-11</th>
<th>2016-17</th>
<th>4-Year Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>1,001</td>
<td>2,040</td>
<td>+1,039</td>
<td>+103%</td>
</tr>
<tr>
<td>Pell</td>
<td>1,498</td>
<td>3,428</td>
<td>+1,930</td>
<td>+129%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>196</td>
<td>557</td>
<td>+361</td>
<td>+184%</td>
</tr>
</tbody>
</table>
Graduation Rates by Race & Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>2003</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>50%</td>
<td>78%</td>
</tr>
<tr>
<td>African American</td>
<td>32%</td>
<td>26%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>22%</td>
<td>57%</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>Institution</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>Florida State University</td>
<td>FL</td>
<td>1,401</td>
<td>24%</td>
<td>1%</td>
</tr>
<tr>
<td>historically black and minority institutions</td>
<td>GA</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>historically black and minority institutions</td>
<td>DC</td>
<td>1,399</td>
<td>15%</td>
<td>2%</td>
</tr>
<tr>
<td>historically black and minority institutions</td>
<td>NC</td>
<td>1,227</td>
<td>91%</td>
<td>4%</td>
</tr>
<tr>
<td>North Carolina A &amp; T State University</td>
<td>NC</td>
<td>1,082</td>
<td>19%</td>
<td>5%</td>
</tr>
<tr>
<td>Florida International University</td>
<td>FL</td>
<td>1,054</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>historically black and minority institutions</td>
<td>GA</td>
<td>1,041</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>historically black and minority institutions</td>
<td>TN</td>
<td>998</td>
<td>12%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Diverse Issues in Higher Education, 2018

LIFT Program at Perimeter College

2017 Entering Cohort:
100% Pell, 100% URMs

Learning communities,
Predictive-analytics tracking,
Proactive advising,
Scholarships, Panther Retention Grants,
Near-peer mentoring, SL

2-year Associate-Degree Graduate Rate: 85%