IMPROVING ACADEMIC ADVISEMENT THROUGH PREDICTIVE_ANALYTICS_AND_PROACTIVE_INTERVENTIONS

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Students Success

- Retention
- Progression
- Graduation

Sure, we lose some—but who's counting?
Goal One

Become a national model for undergraduate education by demonstrating that students from all backgrounds can achieve academic and career success at high rates.
THE ADVISEMENT CHALLENGE: THE MURKY MIDDLE

Student Performance Curve (Illustrative)

Obvious Risk Cases
Mostly Ds and Fs
High Attrition Risk

Murky Middle
Mixture of Bs and Cs
Outcome Still Uncertain

Nearly impossible to pick out who might actually be at risk from a cursory transcript review

The All-Stars
Straight As and Bs
Probable Graduates

GPA 2.0  Academic Performance  GPA 3.0
2011:

- Ratio +2x standard
- 750:1
- 1200:1
- Complicated structure
- Some faculty advisors
- Some departments hired advisors
- No common record keeping
- Little systematic tracking
- Little coordination
- No one responsible for progression and graduation
PROBLEMS FOR ALL

- Problems for Students
  - Excess Hours
  - Excess Time
  - Excess Cost

- Problems for the University
What is Student-Centered Advising?

- Individualized Education Planning
- Pro-active Risk targeting
- Personalized interventions

Goal: Organize advisement in a manner that gives students the information that they need to make decisions that lead to increased retention, progression and graduation
Engaged Campus Community

- Senior Leadership
- Data Governance-Registrar
- Human Resources
  - Clarification of Advisor Roles
  - Skills and competencies
  - Common salary structure
- Space
- Faculty engagement
- Partnerships and Coordinated Care
- Analytic insight from EAB
- Integration of EAB with academic advisement
- Consolidation with Ga Largest 2-Year College
Drilling Down

- Changed *culture* to focus on progression and graduation
- Changed *structure* to support timely interventions
  - University Advisement Center
  - College Offices of Academic Assistance
  - Advisement Board
  - Transition Advisors
  - Graduation Counselors
- Added new *systems*
- Better Tracking
- Use of Data
Today:

300:1
Professional advisors
Every student assigned
Extensive tracking
Comprehensive metrics
Common training
Collaboration between units
Additional Changes to GSU

- Freshmen Registration Model
- Strengthened & Revamped Math Instruction
- Created Alternative Majors to Premium Programs
- Reduction of Major Changes
Freshman Learning Communities with Block Schedules of 5 to 6 courses: 95% of non-Honors Freshmen (Opt-out model)
A Data-Driven Approach
Data and Analytics

- Collect Data
- Pilot
- Revise
- Scale
# Advisor - Student Management

## Master Population Advising Dashboard

### Total Population (by name)

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Current Term Count</th>
<th>Current Term Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADV In Person</td>
<td>1554</td>
<td>9%</td>
</tr>
<tr>
<td>ADV Another Advisor</td>
<td>1148</td>
<td>6%</td>
</tr>
<tr>
<td>ADV Phone</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>ADV Email</td>
<td>16</td>
<td>0%</td>
</tr>
<tr>
<td>ADV Group MA Session</td>
<td>272</td>
<td>2%</td>
</tr>
<tr>
<td>ADV Outreach Housing</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>ADV Outreach MOSS</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>ADV Other Programming</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>RVW: Contacted Phone</td>
<td>23</td>
<td>0%</td>
</tr>
<tr>
<td>RVW: Contacted Email</td>
<td>5616</td>
<td>20%</td>
</tr>
<tr>
<td>RVW: Contacted Schedule Checked</td>
<td>304</td>
<td>2%</td>
</tr>
<tr>
<td>CHECK: All population represented?</td>
<td>TRUE</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Action Status - Current Term

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Current Term Count</th>
<th>Current Term Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Status - Advised</td>
<td>6682</td>
<td>37%</td>
</tr>
<tr>
<td>Action Status - Reviewed</td>
<td>304</td>
<td>2%</td>
</tr>
<tr>
<td>Blank</td>
<td>11176</td>
<td>62%</td>
</tr>
<tr>
<td>CHECK: All population represented?</td>
<td>TRUE</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Fall 2019 Registration Status

<table>
<thead>
<tr>
<th>Fall 2019 Registration Status</th>
<th>Current Term Count</th>
<th>Current Term Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Registered - Incorrect Schedule</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Plans to Register - No Barriers</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Plans to Register - Program Admission Reas</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Student Dropped for Nonpayment</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>AIR Hold</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Balance Hold</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other Holds (Dos, Parking, Housing, LSP/ESL, Library, IM, etc...)</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Called - Left Voicemail</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Email Sent</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Transient</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Not Planning to Register - One Term</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Not Planning to Register - Multiple Terms</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Transitioning to PC Campus</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Transitioning to ATL Campus</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Transferring (Permanent)</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Will Not Return (Permanent)</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Predictive Analytics

- 10 years of data
- 2.5 million grades
- 144,000 student records
- 800+ analytics-based alerts
- 30,000 students tracked daily
Quick overview of Student Profile:

- Risk Analysis
- GPA, Credits
- Repeated Courses
- Categories and Tags
- Student Contact Information
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%
## Chemistry (B.S.)

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
</table>
| • 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) | • 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* |

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

<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Semester 6</th>
</tr>
</thead>
</table>
| • 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 |

<table>
<thead>
<tr>
<th>Semester 7</th>
<th>Semester 8</th>
</tr>
</thead>
<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>
Success Markers

Brighid Abood

Success Markers
The student has missed guidelines for progress. Acting on them can help get the student back on track for successful completion.

1. 6 missed markers

<table>
<thead>
<tr>
<th>Notification</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR1000: COURSE</td>
<td>Did not register</td>
</tr>
<tr>
<td>JOUR1010: COURSE</td>
<td>Did not register</td>
</tr>
<tr>
<td>JOUR2500: COURSE</td>
<td>Did not register</td>
</tr>
</tbody>
</table>

Staff Alerts}

- Message Student
- Add a Note on this Student
- Add a Reminder to this Student
- Report on Advising
- Report on Tutoring
- Schedule an Appointment
- Add to Watch List
- Issue an Alert
- Edit User Settings
- Impersonate User

Student Info
Reports and notes tab allows you to see the advisor reports, professor submitted progress reports, early alerts, and any additional notes on the student.
• Strategic outreach:
  • Target student populations based on risk level.
  • Key intervention times
  • Registration reviews
  • Missed markers
Major Explorer Allows you to see the student’s current major along with related careers to that Major.

It also allows you search for other majors or careers and will show you information on that specific career.
When you click on a specific career it will give you detailed information on the chosen career.
### Bachelor’s Degrees Awarded

<table>
<thead>
<tr>
<th></th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
<th>15-16</th>
<th>16-17</th>
<th>17-18</th>
<th>8-YR Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRICAN AMERICAN</td>
<td>1,001</td>
<td>1,322</td>
<td>1,440</td>
<td>1,550</td>
<td>1,692</td>
<td>1,825</td>
<td>1,977</td>
<td>2,017</td>
<td>2,035</td>
<td><strong>103%</strong></td>
</tr>
<tr>
<td>PELL</td>
<td>1,298</td>
<td>1,648</td>
<td>1,835</td>
<td>2,007</td>
<td>2,052</td>
<td>2,501</td>
<td>3,379</td>
<td>3,428</td>
<td>3,473</td>
<td><strong>168%</strong></td>
</tr>
<tr>
<td>HISPANIC</td>
<td>196</td>
<td>300</td>
<td>328</td>
<td>372</td>
<td>414</td>
<td>435</td>
<td>443</td>
<td>501</td>
<td>558</td>
<td><strong>185%</strong></td>
</tr>
</tbody>
</table>
Graduation Rates by Race & Ethnicity

6-Year Graduation Rates Among First-Time Full-Year Freshman: Bachelor’s Degrees

- White: 31.6% (12 years ago), 50.3% (today), 74.8% (today with National Student Clearinghouse added)
- African American: 25.6% (12 years ago), 57.6% (today), 74.9% (today with National Student Clearinghouse added)
- Hispanic: 22.0% (12 years ago), 54.9% (today), 74.7% (today with National Student Clearinghouse added)
<table>
<thead>
<tr>
<th><strong>PC Students:</strong></th>
<th><strong>UAC - PC Students:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 yr. to 4 yr. degree completion</td>
<td><strong>UAC-PC Transition Services:</strong></td>
</tr>
<tr>
<td>Admissions Process</td>
<td>Transition Advisement Services</td>
</tr>
<tr>
<td>30 credit hours completed</td>
<td>2yr. &amp; 4 yr. Degree requirements</td>
</tr>
<tr>
<td>2.00 GPA</td>
<td>Coordinated Care:</td>
</tr>
<tr>
<td>Student Benefit:</td>
<td>UAC- ATL Advisor</td>
</tr>
<tr>
<td>Associates degree awarded upon completion of 60 credit hours</td>
<td>Financial Aid</td>
</tr>
<tr>
<td></td>
<td>Registration</td>
</tr>
<tr>
<td>Year</td>
<td>Retention Rate</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
</tr>
<tr>
<td>2018</td>
<td>SP 18 = 70%</td>
</tr>
<tr>
<td>2016</td>
<td>SP 16 = 63.4%</td>
</tr>
</tbody>
</table>

*Georgia State University*
Questions