Momentum Year
Strategies

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Creating Clear Degree Pathways to Success
The Graduate Transcript Graph
The Graduate Transcript Graph
10,000 USG Students

2,500 who either completed their first credit bearing math and/or writing class or completed neither during their first academic year
English and Math

1st yr - Did not pass English or Math: 6%

1st yr - Passed English: 37%

1st yr - Passed Math: 41%

1st yr - Passed both English and Math: 66%

50% Complete Both
English and Math

- 1st yr - Did not pass English or Math (4%)
- 1st yr - Passed English (23%)
- 1st yr - Passed Math (19%)
- 1st yr - Passed both English and Math (52%)

A State College
System-wide Math Completion for students beginning in Developmental Mathematics

ACT Math Subscores

Prepare for Credit Model

ACT Math Subscores

UNIVERSITY SYSTEM OF GEORGIA
System-wide Math Completion for students beginning in Developmental Mathematics

ACT Math Subscores

10 Standard Deviations

Prepare for Credit Model
Direct Credit

ACT Math Subscores

0%
10%
20%
30%
40%
50%
60%
70%

13 14 15 16 17 18 19
Co-requisite Remediation in Tennessee
Completion of Gateway Math by ACT Sub-score

Community College Pre-requisite Model vs. Co-requisite Model

ACT Math Subscore

Pre-requisite Model AY 2012-13

Completion of Gateway Math by ACT Sub-score

- <14: 2.7%
- 14: 3.8%
- 15: 6.8%
- 16: 11.5%
- 17: 19.7%
- 18: 25.6%
- No ACT: 13.1%
- Total: 12.3%

Total: 55%
Completion of Gateway Writing by ACT Sub-score

Community College Pre-requisite Model vs. Co-requisite Model

Pre-requisite Model AY 2012-13

Co-requisite Model AY 2015-16

ACT Writing Subscore

<table>
<thead>
<tr>
<th>ACT Writing Subscore</th>
<th>Pre-requisite Model AY 2012-13</th>
<th>Co-requisite Model AY 2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>25.3%</td>
<td>54%</td>
</tr>
<tr>
<td>14</td>
<td>27.8%</td>
<td>64%</td>
</tr>
<tr>
<td>15</td>
<td>33.2%</td>
<td>65%</td>
</tr>
<tr>
<td>16</td>
<td>36.9%</td>
<td>67%</td>
</tr>
<tr>
<td>17</td>
<td>37.8%</td>
<td>70%</td>
</tr>
<tr>
<td>No ACT</td>
<td>25.1%</td>
<td>58%</td>
</tr>
<tr>
<td>Total</td>
<td>30.9%</td>
<td>62%</td>
</tr>
</tbody>
</table>
Completion of Gateway Math by ACT Sub-score

University “MATH1000” Model vs. Co-requisite Model

Pre-requisite Model AY 2012-13

<table>
<thead>
<tr>
<th>ACT Math Subscore</th>
<th>Pre-requisite Model</th>
<th>Co-requisite Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;14</td>
<td>60%</td>
<td>32.1%</td>
</tr>
<tr>
<td>14</td>
<td>44.6%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>46.7%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>55.7%</td>
<td>50%</td>
</tr>
<tr>
<td>17</td>
<td>66.5%</td>
<td>69.6%</td>
</tr>
<tr>
<td>18</td>
<td>69%</td>
<td>65%</td>
</tr>
<tr>
<td>Total</td>
<td>58.9%</td>
<td>75%</td>
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</tbody>
</table>
Co-requisite Remediation in Georgia
System Comparison of Success in Gateway Math Classes

ACT Math Subscore

- 2013 Traditional LS
- 2015 Foundations
- 2016 Foundations
- 2015 Corequisite
- 2016 Corequisite

Success rates for different ACT Math Subscores across various system programs.
System Comparison of Success in Gateway Math Classes

State Universities
System Comparison of Success in Gateway Mathematics Classes

- Math Modeling: 63% (Foundations) vs. 69% (CoRequisite)
- Quantitative Reasoning: 64% (Foundations) vs. 65% (CoRequisite)
- College Algebra: 56% (Foundations) vs. 59% (CoRequisite)
Community College students who passed a Math class in their 1st Year

Fall to Fall Retention:
- Pre-requisite Model: 47% (33% increase)
- Co-requisite Model: 63%

Earned Credit Hours:
- Pre-requisite Model: 19.1 SCH (18% increase)
- Co-requisite Model: 22.6 SCH
Fall to Fall Retention

ACT Math Subscores

<table>
<thead>
<tr>
<th>Subscore</th>
<th>Foundations</th>
<th>CoRequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>51%</td>
<td>54%</td>
</tr>
<tr>
<td>15</td>
<td>54%</td>
<td>51%</td>
</tr>
<tr>
<td>16</td>
<td>56%</td>
<td>54%</td>
</tr>
<tr>
<td>17</td>
<td>59%</td>
<td>53%</td>
</tr>
<tr>
<td>18</td>
<td>63%</td>
<td>55%</td>
</tr>
<tr>
<td>19</td>
<td>68%</td>
<td>65%</td>
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<tr>
<td>None</td>
<td>65%</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>66%</td>
<td>55%</td>
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Retention by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>64%</td>
<td>65%</td>
<td>69%</td>
<td>66%</td>
<td>65%</td>
<td>79%</td>
</tr>
<tr>
<td>Black</td>
<td>56%</td>
<td>52%</td>
<td>63%</td>
<td>65%</td>
<td>57%</td>
<td>78%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>56%</td>
<td>65%</td>
<td>69%</td>
<td>65%</td>
<td>49%</td>
<td>79%</td>
</tr>
<tr>
<td>Two or More</td>
<td>56%</td>
<td>65%</td>
<td>65%</td>
<td>65%</td>
<td>65%</td>
<td>67%</td>
</tr>
<tr>
<td>Unknown</td>
<td>64%</td>
<td>65%</td>
<td>69%</td>
<td>66%</td>
<td>57%</td>
<td>79%</td>
</tr>
<tr>
<td>Asian</td>
<td>84%</td>
<td>79%</td>
<td>85%</td>
<td>83%</td>
<td>85%</td>
<td>85%</td>
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</table>

Foundations and CoRequisite
Average Community College Instructional Cost per Successful Student in Mathematics

- Pre-requisite Model: $3,088.00
- Co-requisite Model: $1,536.00

Is Corequisite Remediation Cost-Effective? Early Findings From Tennessee Belfield, Davis & Lahr,
Community College Research Center, Columbia University
Faculty Learning Communities At Scale

- Key Metrics & Reporting
- Analysis & Understanding
- Decisive Action
- Modeling & Planning
The Graduate Transcript Graph
Campus-wide Course Impact

- ENGL1101
- POLS1101
- PSYC1101
- MATH1111

Size of "bubble" depicts the overall impact of increased learning in each class on overall student success metrics.
Productive Academic Mindset

Perceived purpose of coursework

Feel connected to their institution and that they belong...

Believe they are capable of learning the material...

Confidence interacting with Faculty and Staff

GRIT and Perseverance
System-wide success rates in Freshman Mathematics Classes

“What I learn in my math classes will be useful in my future.”

ACT Mathematics Subscores

<table>
<thead>
<tr>
<th>Subscore Range</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>above 30</td>
<td></td>
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</tr>
</tbody>
</table>
System-wide success rates in Freshman Mathematics Classes

- 80%: “What I learn in Math will be useful in my career”
- 75%: “What I learn in Math will not be useful in my career”
- 70%: “What I learn in Math will not be useful in my future”
- 65%: “What I learn in Math will not be useful to me at all”
System-wide success rates in Freshman Mathematics Classes

“What I learn in Math will be useful in my career”
System-wide success rates in Freshman Mathematics Classes

“What I learn in Math will be useful in my career”
System-wide success rates in Freshman Mathematics Classes

“What I learn in Math will be useful in my career”
System-wide success rates in Freshman Mathematics Classes

“What I learn in Math will be useful in my career”
Math Pathways
The effect of course enrollments in the first year on graduation rates

- 1st yr - Did not attempt 9hrs in focus area: 48%
- 1st yr - Attempted 9hrs in focus area: 67%
- 1st yr - Earned 9hrs in focus area: 74%
PURPOSEFUL CHOICE

- Inform
- Discern
- Affirm

BEGIN WITH THE END IN MIND
State University 6-year Graduation Rates based on hours enrolled in First Semester

- ACT Score
  - 0-6 hours
  - 7-10 hours
  - 11-13 hours
  - 14+ hours

Graph showing graduation rates for different ACT scores and hours enrolled.
State University 6-year Graduation Rates based on hours enrolled in First Semester

ACT Score

0-6 hours  7-10 hours

13%  22%  38%  57%
Predictive Analytics
Comparison of average earned hours in a 12-hour schedule disaggregated by the number of recommended classes.
USG Momentum Year

Making a *purposeful* program choice

Creating a *productive* Academic Mindset

Attempting the right 30 *hours* of a *Clear Pathway*

Attempting 9 *hours* in Academic Focus

Complete initial *English* and *Math*
What Data says about the impact?
Since 2013...

Community College 3yr Graduation Rate
61%

University 4yr Graduation Rate
26%
Since 2013…

**Community College 3yr Graduation Rate**
- 93%

**University 4yr Graduation Rate**
- 51%

Under-represented Minority Students
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and Chief Academic Officer
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