A Momentum Year Strategy

COMPLETE COLLEGE AMERICA

Bruce Vandal
Senior Vice President

bvandal@completecollege.org
@bruceatcca/ @completecollege
COMPLETE
COLLEGE
AMERICA

Working with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations.

www.completecollege.org
Our Approach

Work with states, systems and consortia to implement evidence-based strategies at scale to see double-digit gains in outcomes.
On-Time Graduation Rates

2-Year: 5%

4-Year (non-flagship): 19%

4-Year (flagship/very high research): 36%
150% Graduation Rates

2-Year: 13%
4-Year (non-flagship): 43%
4-Year (flagship/very high research): 68%
Excess Credits

2-Year
60 Credits
80.9

4-Year
(Non-flagship)
120 Credits
133.5

4-Year
(Flagship/Very high research)
120 Credits
134.6
Time to Degree (Full-Time Students)

2-Year
YEARS 1 2 3 4 5

3.8 YEARS

4-Year (Non-Flagship)
YEARS 1 2 3 4 5

4.9 YEARS

4-Year (Flagship)
YEARS 1 2 3 4 5

4.5 YEARS
What is a Momentum Year?
A First Year Strategy to Ensure Students:

- Complete 30 credits
- Complete Gateway Math and English Courses
- Enter a Program of Study
- Earn 9 credits in the Program of Study
Core Elements of Momentum Year

- 15 to Finish Strategy
- Math Pathways
- Corequisite Support
- Meta-Majors
- Default First Year Schedule
15 CREDITS A SEMESTER TO GRADUATE ON TIME
#15T0FINISH
Half of American college students need just one more course per semester to be on track for on-time graduation.

Percent of Students Completing 30 Credits Per Year (On-Time Students)

All Students: 27%

4-Year NF: 32%

4-Year Flagship: 41%

Percent of Students Completing 24 Credits Per Year (Full-Time but Not On-Time)

2-Year: 11%

All Students: 50%

4-Year NF: 60%

4-Year Flagship: 79%
% First-Time, Full-Time Students Enrolled in 15+ Credit Hours (1st semester)

2011: 27%
2012: 27%
2013: 40%
2014: 66%
2015: 67%
End of Year GPA vs. Average Credits Per Term During Freshman Year for Students with Varying High School GPAs
MATH PATHWAYS
college algebra courses serve two distinct student populations: the overwhelming majority for whom it is a terminal course …, and the relatively small minority for whom it is a gateway to further math. Neither group is well-served by the traditional … college algebra course.
Few in College Algebra, Enroll in Calculus

Students Who Take College Algebra

- 60% Do Not Take Any Form of Calculus
- 30% Take Business Calculus
- 10% Ever Take Calculus 1

Virtually no students who pass college algebra ever start Calculus III, which is a key course for STEM majors.

The mathematical sciences community must begin to think in terms of a broader range of entry-level courses and pathways into and through curricula for all students,
Math Aligned to Major

- Applicable to Program of Study Requirements
- Transferable into Programs of Study at Receiving Institutions
- Designed to be delivered with a Corequisite for Underprepared Students
- A Key Component of Pre-Major Advising
Math Is Aligned to Majors

**Meta-Major**
- Humanities/Arts
- Social Sciences
- Health Sciences/Business
- Technical/Certificate Programs
- Engineering/Hard Sciences

**Gateway Math**
- Quantitative Reasoning
- Statistics/Modeling
- Technical Math
- College Algebra/Pre-Calc/Calculus

**Program**
- Classics
- Performing Arts/Cultural Studies
- Psychology/Political Science/Communications
- Welding/Carpentry
- Civil Engineering/Chemical Engineering/Chemistry
Impact of Math Pathways

- Nevada saw dramatic improvements in enrollment in gateway math in year one.
- Indiana and Montana saw dramatic drop in percent of students deemed underprepared.
- Missouri saw increases in gateway math enrollment and course completions.
COREQUISITE REMEDIATION
African Americans, Hispanics and Pell Students are Over Represented

### 2-year Students

- **Received Pell Grant:**
  - White, non-Hispanic: 53%
  - Hispanic: 63%
  - Black, non-Hispanic: 70%

- **Pell Grant**:
  - White, non-Hispanic: 69%

### 4-year Non-Flagship Students

- **Received Pell Grant:**
  - White, non-Hispanic: 23%
  - Hispanic: 35%
  - Black, non-Hispanic: 44%

- **Pell Grant**:
  - White, non-Hispanic: 37%
Most are in Math – Far Too Many Require Both Math and English

2-year Students

- White, non-Hispanic: 50% Both, 20% Math, 24% English
- Hispanic: 54% Both, 30% Math, 37% English
- Black, non-Hispanic: 59% Both, 40% Math, 50% English
- Received Pell Grant: 60% Both, 32% Math, 40% English
The System Does Not Work, Particularly for African Americans

Gateway Course Completion in 2 years
2-year college remedial students

- White, non-Hispanic: 23%
- Hispanic: 20%
- Black, non-Hispanic: 11%
- Received Pell Grant: 19%
Remediation

Student attrition is at the heart of the matter…
Remediation: The effect of attrition.

Students assigned 3 or more semesters of math remediation.

Completed 1st semester of remediation.

Completed 2nd semester of remediation.

Completed 3rd semester of remediation.

Passed gateway course.

Enrolled and completed | Did not complete | Did not enroll or stopped enrolling

LOST

LOST

LOST

LOST

KNOW THIS The remediation system is broken. More students quit than fail.

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Completed 1st semester of remediation.

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Passed gateway course.

Enrolled and completed
Did not complete
Did not enroll or stopped enrolling

LOST

LOST

LOST

LOST

KNOW THIS
The remediation system is broken. More students quit than fail.

Corequisite Models

- Gateway Course
- Paired Remedial Course
  - Accelerated Learning Program
- Gateway Course
  - Required 0 Credit Lab
  - Structured Assistance
- Gateway Course
  - One Additional Credit
  - 101+ Model
Traditional Remediation Results

- **Colorado**: 31% (English) 20% (Math)
- **Georgia**: 16% (English) 20% (Math)
- **Indiana**: 37% (English) 29% (Math)
- **Tennessee**: 31% (English) 12% (Math)
- **West Virginia**: 37% (English) 14% (Math)
One Semester Scaled Results

Traditional Remediation National Avg for Gateway Course Success

- Colorado: 64% English, 61% Math
- Georgia: 71% English, 63% Math
- Indiana: 55% English, 64% Math
- Tennessee: 64% English, 61% Math
- West Virginia: 68% English, 62% Math

22%
Corequisites result in dramatic improvements in gateway course success

TBR Community College Gateway Math Success in One Year

Pre-Requisite Model 2012-13
Corequisite Full Implementation 2015-16
Getting on the Path: Meta-Majors

BUSINESS

HEALTH SCIENCES

SOCIAL SCIENCES

EDUCATION

HUMANITIES

ARTS

STEM
# Default First Year Schedule

## FIRST-YEAR CORE

<table>
<thead>
<tr>
<th>Term 1</th>
<th>Credits</th>
<th>Term 2</th>
<th>Credits</th>
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<tbody>
<tr>
<td>English 101</td>
<td>English 101-</td>
<td>3 credits</td>
<td>English 102</td>
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<tr>
<td>Pre-calc 101</td>
<td>Pre-calc 101+</td>
<td>3</td>
<td>Calculus 101</td>
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<td>Biology, Chemistry, or Physics Core w/lab</td>
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<td>Bio, Chem, or Physics Core w/lab</td>
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<tr>
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<td>Student Success Seminar</td>
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<td>STEM or Engineering Options Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Credits: 15**
A Model Pathway

Advise and Assess
Pre-Major Advising

Choose Meta-major
Social Sciences
STEM
 Humanities

Default Schedule
Coreq
Stats
College Algebra
QR

Choose Major
Coreq
Major
Major
Major
The Tennessee Story

• Virtually 100% Corequisite at all state universities and community colleges in Fall, 2015-16
• Transferable Math Pathways
  ➢ Quantitative Reasoning
  ➢ Statistics
  ➢ College Algebra/Calculus
• Corequisites for QR and Stats
• Bridge from QR to College Algebra
Corequisites result in dramatic improvements in gateway course success

TBR Community College Gateway Math Success in One Year

- Pre-Requisite Model 2012-13
- Corequisite Full Implementation 2015-16

Success Rates:
- <13: 2.7%
- 14: 3.8%
- 15: 6.8%
- 16: 11.5%
- 17: 19.7%
- 18: 25.6%
- No ACT: 13.1%
- Overall: 12.3%
- 79.5%
Corequisite students earn more credits and persist at higher rates

For example at community colleges:

- Retention rates increased from:
  - 47% to 63% at community colleges
  - 73% to 79% at the state universities.

- Credit accumulation in the first year improved from 19 credits to 22.6 credits
CCA/CUNY Partnership: Building the Momentum Year

Objective: Implement and Scale Momentum Year Strategies at CUNY institutions
THE CCA WAY
The Momentum Year and Scaling Standards

Corequisite Remediation
Math Pathways
Default Schedules
Meta-Majors
15 to Finish

HIGHLY-STRUCTURED IMPLEMENTATION DESIGN

EQUITY: RACE, INCOME, AGE
METRICS AND EVIDENCE
POLICY
COMMUNICATIONS
Optimal Complete College Sequence

**ESTABLISH THE CONDITIONS** to catalyze change

- Develop a Leadership Team
- Develop a Case Statement
- Propose Project Agreements
- Gain Institutional Commitments
- Support Institutional Planning

**RESTRUCTURE SYSTEMS** to improve outcomes and narrow gaps

**ADVISORS**
- Launch 15 to Finish
- Identify Meta-Majors
- Create MOMENTUM Degree Maps (GPS)
- Implement Intake Advising Strategy

**FACULTY**
- Develop and Deploy Math Pathways
- Replace Remediation with Corequisite Support

**DEPLOY TARGETED INTERVENTIONS** to permanently close gaps

- Monitor Impact of Game Changer Scaling to Drive Continuous Improvement
- Adult and Underserved Student Strategies
Develop Case Statement for Strategy

• Define Problem
  ✓ Descriptive data on student outcomes
  ✓ The structural barriers to student success
  ✓ Identify the key outcomes to be achieved

• Articulate Solutions
  ✓ Show evidence of success
  ✓ Offer plan for scale

• Build Buy-In
  ✓ Directly engage stakeholder groups
  ✓ Finalize report
Draft Institutional Commitments

• Outline strategies campuses are to implement
• Articulate key metrics to be measured
• Define scale
• Set timeline for implementation
• Gain Support from all key stakeholders
Hold Challenge Event to Formalize Commitments

- Present institutional commitment and case statement.
- Get initial commitments from campuses to participate.
- Hold challenge event to launch strategy and invite remaining campuses to commit to initiative.
Develop Institutional Plans

• Create college implementation teams
• Host systemwide planning academies
• Campus teams develop implementation plans for each strategy
• Submit plans to system leadership team
• Establish system for tracking progress
Today’s Outcomes

• Discuss elements of momentum year strategy
• Begin making the case for institutions
• Explore strategies for gaining institutional commitments
• Discuss activities to support institutional planning and implementation
• Discuss leadership of initiative
Today’s Schedule

10:00 – 11:00  Game Changer Expert Panel
11:00 – 11:45  Change at Scale - Tristan Denley
12:00 – 12:45  CUNY Current Efforts
12:45 – 1:00  Working Group Instructions
1:00 – 3:00  Sub-Group Planning
3:15 – 4:15  Report Outs
4:15 – 5:00  Next Steps