Understanding Impact: ROI Framework for Developmental Education

JFF State Policy Network Meeting
Austin, TX – January 31, 2019
STRONG START TO FINISH

Building momentum for postsecondary success

@_Strong_Start

EDUCATION COMMISSION OF THE STATES

Your education policy team.

@edcomission
By the Numbers

**The Status Quo:**

**50:** Percent of students attending two-year institutions who are placed in ineffective developmental (remedial) courses

**33:** Percent of students attending four-year colleges who are placed in ineffective developmental courses.

**35:** Percent of four-year students in developmental education who graduate within six years.

**15:** Percent more African-American and Latino students enroll in developmental education courses than white students.

**An Evidence-based Future:**

**60:** Percent of students who pass math and English in one year using co-requisite approaches – compared to 22 percent nationally

**51:** Percent increase in students being placed into college level math after implementing multiple measures

**70:** Percent of developmental education math students who earn college credits when developmental math course is integrated with college-level statistics class.
Why We Are Different
Strong Start to Finish’s Goal

Significantly increase the number and proportion of low-income students, students of color and returning adults who succeed in college math and English and enter a program of study in their first year of college.

Every student deserves a strong start to finish.

When students get off to a strong start in their first year of college, nearly 70 percent frequently pass math and English in one semester – making them much more likely to graduate career-ready.

70%
How We Work

Engage

Systems that commit to actionable, evidence-based policies and practices that help all postsecondary systems and metropolitan regions give more college students a strong start.

Deepen

Our collective knowledge so that actionable, evidence-based policies and practices that remove existing barriers to success for low-income students, students of color and returning adults can be implemented at scale.

Grow

A network designed to support the implementation of actionable, evidence-based policies and practices.
Target Populations in Ohio

- Adults 25+
- Students of Color
- Economically Disadvantaged
  - Rural
Interconnected Structures to Impact Completion

1. Learning Network
2. Implementation Forums
3. Campus-Level Action and Success Supports (CLASS) grants

50%

Goal for number of students completing college-level mathematics and English by 2021
Commitment to Priority Actions

1. Clearly structured programs of study for all majors;
2. Align gateway math and English courses to major;
3. Implement co-requisite remediation at scale;
4. Build advising structures to help meet the goal.
Benefits to the Institutions--SSTF

• Learning Network
• Implementation Forums
• Sova Solutions: Climate Scans
• Campus-level Action and Success Supports (CLASS) grants
Understanding Impact: A Holistic Return on Investment Framework
Progress through a state higher education system

Student Progression Through the Developmental Math Sequence

- 100% (63,650) Referred to 3+ Levels of Remediation
- 26% Did Not Enroll in Next Course
- 15% Level 2 Course
- 7% Level 1 Course
- 4% Gatekeeper
- 2% Passed Gatekeeper Math
- 11%
- 22% Did Not Pass/Complete Course
Completion of Gateway Math by ACT Sub-score

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

Results of TBR Co-requisite Full Implementation

Pre-requisite Model AY 2012-13

Full Implementation - Fall 2015
Randomized Controlled Trial (conducted Fall 2013)

Course Pass Rates

<table>
<thead>
<tr>
<th>Program</th>
<th>Pass Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EA (Traditional Remediation)</td>
<td>39.3%</td>
</tr>
<tr>
<td>EA-WS (Traditional Remediation + Workshop)</td>
<td>44.9%</td>
</tr>
<tr>
<td>Stat-WS (College-Level Course + Workshop)</td>
<td>55.7%</td>
</tr>
</tbody>
</table>

Enrollment Status After 3 Years

<table>
<thead>
<tr>
<th>Program</th>
<th>Not Enrolled</th>
<th>Enrolled</th>
<th>Graduated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem Alg N=297</td>
<td>52.9%</td>
<td>25.0%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Elem Alg w/WS N=313</td>
<td>55.6%</td>
<td>26.7%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Stat w/ WS N=297</td>
<td>48.1%</td>
<td>26.7%</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

Logue, Watanabe-Rose, & Douglas
Impact is best understood through a holistic definition of return.

This comprehensive definition was applied to developmental education reforms at 4 case study institutions.

Through this study, identified cross-cutting drivers of success that can be leveraged by other institutions.
Holistic lens on return has 3 key components

- **Access**
  - Achievement gap
  - Access gap

- **Outcomes**
  - Gateway course progression

- **Economics**
  - Student tuition savings
  - Institution cost per credit
  - Institution cost per gateway course completer
## Overview of case study institution reforms

<table>
<thead>
<tr>
<th>Institution</th>
<th>Co-req pathway math reform</th>
<th>Emporium pathway math reform</th>
<th>Co-req w/ courseware math reform</th>
<th>Placement English reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate enrollment</td>
<td>9k</td>
<td>69k</td>
<td>26k</td>
<td>18k</td>
</tr>
<tr>
<td>% Pell eligible</td>
<td>47%</td>
<td>26%</td>
<td>51%</td>
<td>26%</td>
</tr>
<tr>
<td>% diverse</td>
<td>42%</td>
<td>37%</td>
<td>47%</td>
<td>24%</td>
</tr>
<tr>
<td>Enroll. /completer</td>
<td>Reduced 46 to 4</td>
<td>Reduced 30 to 11</td>
<td>Reduced 11 to 3</td>
<td>Reduced 8 to 4</td>
</tr>
<tr>
<td>Cost / completer</td>
<td>~64% decrease</td>
<td>~37% decrease</td>
<td>~30% decrease</td>
<td>~69% decrease</td>
</tr>
</tbody>
</table>
Drivers of successful reform consistent across studies

Use co-requisite models whenever possible

Engage and support a broad set of stakeholders

Implement at scale, with minimal piloting

Make data-informed decisions in design and improvement
Return on Investment in Ohio
Value of information in Ohio

• Not just expenses, but revenue

• Performance-based Funding
  • Course Completions
  • Completion of Developmental Education
  • Completions of Degrees and Certificates

• Increased tuition revenue from retention
Value of Information to an Institution

• Sinclair
  • Math Pathways, Multiple Measures, Co-requisites
• Results
  • 400 more students (36%) completed gateway math in one year
    • PBF increases
    • Increased likelihood they will graduate
    • Increased tuition revenue
Strategic Investment Impacts Series
Total Enrollments Per Completer
Calculating a Return on Investment Outcome
Christopher M. Adam

For many students, though no completing a foundational gateway course is important to a sequence of developmental education courses. While these courses were designed to help students, the fact is that most students who start in developmental education courses never complete the sequence. We are now on to complete a gateway course needed to enter a program of study?

First, a body of research shows that for many students who would have traditionally been placed in a developmental education course, completing a gateway course with appropriate designed support—through a co-requisite, compressed, or modified/encompassing—can significantly increase success. A recent study for postsecondary institutions has accomplished reduced student enrollment in developmental education courses.

While we, as leaders, understand this to be true, we are often unaware of impact methodologies that express the impact of developmental education reforms on the campus to valued stakeholders.

Overview

Three parts

- Calculation
- Leadership Dialogues
- Communicating Findings
Understanding Impact Activity

• Step 1. Calculate an ROI measure
  • Total Enrollments per Completer,
  • Weighted Average Instructional Cost per Credit Hour
  • Access Rate Gaps

• Step 2. Leadership Dialogues
  • Review the questions in the Strategic Investment Impacts Brief.
  • What questions would you add?

• Step 3. Communicating outcomes
  • Use the “Recommended Process” in the SII brie to develop a one-pager using your data.
Takeaways

• Groups Share out.
Questions?

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