The Impact of Developmental Summer Bridge Programs on Students’ Success

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Council for the Study of Community Colleges Conference
April 9, 2011
Overview of Presentation

- Introduction and Problem Statement
- Description of Program
- Research Questions and Design
- Findings
  - Implementation
  - Early Program Impacts
- Moving Forward
Introduction

- NCPR is a collaboration between the Community College Research Center, MDRC, the Curry School of Education at UVA, and faculty at Harvard
- Conducted in cooperation with the Texas Higher Education Coordinating Board, with principal funding from IES and supplemental funding from the Houston Endowment.
What is the Problem?

- Over 60 percent of entering community college students are referred to developmental education
- Developmental education is not very effective for students near the cutoff (Calcagno & Long, 2008)
- Farther below, mixed results—dev ed influences students differently depending on their level of academic preparedness (Boatman & Long, 2010)
- A majority of students do not complete the sequences to which they are referred (Bailey, Jeong, & Cho, 2008)
- As a result, most developmental students are unable to complete college
Pre-College Programs

- Offer comprehensive approaches by combining Academic Skills & College Knowledge
- Vary in terms of scope, sponsorship, and implementation
- Common form is summer bridge programs
  - Long used in higher education
  - Research is limited in number and rigor
    - Lack of control group, lack of follow-up, single institution studies, rely on student self-report
Texas Developmental Summer Bridge Study

- Purpose: Assess the effectiveness of a summer bridge model in improving college preparation and success for students in need of remediation.
Programs in the Texas DSB Study

- 8 open access institutions in Texas
- Recent high school graduates
- Four to five weeks (64 -100 hours)
- Accelerated instruction in developmental math, English, and/or reading at the college
- Student cohorts
- Academic and student services support
- “College knowledge” component
- Student stipend of up to $400 for completers
The Research

Implementation

- What do the programs and students look like?
- What are the challenges in implementation?
- What program design elements show promise?

Early Impacts

- Do summer bridge programs reduce the need for developmental education, and improve college outcomes *over and above* how students perform without these programs?
Random Assignment Design

Targeted students invited to participate in study

Students give consent

Baseline data collected

Random Assignment

Program group (60%) Could enroll in summer bridge program

Control group (40%) Received regular courses and services
Implementation Findings

- Areas of interest
  - Recruitment
  - Curriculum and Instruction
  - College Knowledge
  - Student Supports

- Though some challenges, considered to be well-implemented and a fair test of the DSBP model
Select Student Characteristics

- 84% Hispanic, 8.7% White, 6.6% African American
- 50% speak English only at home
- 62% Female
- 95% age 19 and below
- 41% first in family to attend college
- 61% qualified for free/reduced lunch
- Motivations for applying to summer bridge: attaining college level standing, improving skills, & experiencing college
### Participation and Attrition

<table>
<thead>
<tr>
<th>College</th>
<th>Eligible for Program</th>
<th>Control #</th>
<th>Started Program # and %</th>
<th>Finished Program</th>
<th>% of starters who finished program</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso</td>
<td>165</td>
<td>108</td>
<td>139 (84%)</td>
<td>138</td>
<td>99%</td>
</tr>
<tr>
<td>Lone Star-CyFair</td>
<td>74</td>
<td>48</td>
<td>65 (88%)</td>
<td>64</td>
<td>98%</td>
</tr>
<tr>
<td>Lone Str-Kingwood</td>
<td>51</td>
<td>35</td>
<td>51 (100%)</td>
<td>41</td>
<td>80%</td>
</tr>
<tr>
<td>Palo Alto</td>
<td>52</td>
<td>35</td>
<td>52 (100%)</td>
<td>35</td>
<td>67%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>89</td>
<td>58</td>
<td>51 (57%)</td>
<td>47</td>
<td>92%</td>
</tr>
<tr>
<td>St. Phillips</td>
<td>153</td>
<td>102</td>
<td>146 (95%)</td>
<td>139</td>
<td>95%</td>
</tr>
<tr>
<td>South Texas</td>
<td>83</td>
<td>54</td>
<td>72 (87%)</td>
<td>63</td>
<td>88%</td>
</tr>
<tr>
<td>TAMIU</td>
<td>126</td>
<td>85</td>
<td>113 (90%)</td>
<td>111</td>
<td>98%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>793</td>
<td>525</td>
<td>689 (87%)</td>
<td>638</td>
<td>93%</td>
</tr>
</tbody>
</table>
Enrollment

Significance: * = 10%; ** = 5%; *** = 1%

<table>
<thead>
<tr>
<th></th>
<th>Summer 2009</th>
<th>Fall 2009</th>
<th>Spring 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>34.5%</td>
<td>77.3%</td>
<td>74.4%</td>
</tr>
<tr>
<td>Control</td>
<td>15.0%</td>
<td>76.4%</td>
<td>75.3%</td>
</tr>
</tbody>
</table>
Summer 2009 Credits

Significance: * = 10%; ** = 5%; *** = 1%
Fall 2009 Credits

- Total credits attempted: 9.1 Program, 8.8 Control
- College credits: 6.1 Program, 5.9 Control
- Developmental credits: 3 Program, 3 Control

Significance: * = 10%; ** = 5%; *** = 1%
Spring 2010 Credits

Total credits attempted: Program 9.3, Control 9.1
College credits: Program 7.7, Control 7.1
Developmental credits: Program 1.6, Control 2

Significance: * = 10%; ** = 5%; *** = 1%
Cumulative Measures

Significance: * = 10%; ** = 5%; *** = 1%

Total credits attempted
- Program: 19.9
- Control: 18.8

College credits
- Program: 14.3
- Control: 13.3

Developmental credits
- Program: 5.5
- Control: 5.4
## Early Program Impacts Summary

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Program</th>
<th>Control</th>
<th>Impact</th>
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<tbody>
<tr>
<td><strong>Summer 2009</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollment (any course)</td>
<td>34.5%</td>
<td>15.0%</td>
<td>19.5***</td>
</tr>
<tr>
<td>Total credits attempted</td>
<td>1.4</td>
<td>0.8</td>
<td>0.6***</td>
</tr>
<tr>
<td>College credits</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2**</td>
</tr>
<tr>
<td>Developmental credits</td>
<td>0.9</td>
<td>0.5</td>
<td>0.4***</td>
</tr>
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<td>5.9</td>
<td>0.2</td>
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<tr>
<td>Developmental credits</td>
<td>3.0</td>
<td>3.0</td>
<td>0.0</td>
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<td>-0.9</td>
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<td>9.3</td>
<td>9.1</td>
<td>0.2</td>
</tr>
<tr>
<td>College credits</td>
<td>7.7</td>
<td>7.1</td>
<td>0.6*</td>
</tr>
<tr>
<td>Developmental credits</td>
<td>1.6</td>
<td>2.0</td>
<td>-0.3**</td>
</tr>
<tr>
<td><strong>Cumulative Measures</strong></td>
<td></td>
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<td>5.5</td>
<td>5.4</td>
<td>0.1</td>
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Moving Forward

- Initial Thoughts
- Interim report will be released in June 2011
- Final Report with 2 year follow-up to be released in July 2012
For more information:

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NCPR is funded by the Institute of Education Sciences of the U.S. Department of Education