Bridging the Gap: The Impact of Developmental Summer Bridge Programs on Student Success

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THE DEVELOPMENTAL SUMMER BRIDGE STUDY

- Implemented by NCPR -- CCRC, MDRC, and UVA
- Conducted in cooperation with the Texas Higher Education Coordinating Board
- Funded by the IES-US ED with supplemental funding from the Houston Endowment
- Dates of research: 2008-2012
- Two reports
  - Implementation and 1st year impact results
  - Final impact analyses
Assess the effectiveness of a summer bridge model in improving college preparation and success for students in need of remediation.
Programs in the Developmental Summer Bridge Study

- 8 open access institutions in Texas
- Programs (2009) consisted of:
  - Student cohorts of recent high school graduates
  - Four to five weeks (64 - 100 hours)
  - Accelerated instruction in developmental math, English, and/or reading at the college
  - 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?

Cost Study
- What are the costs – and the cost effectiveness – of developmental summer bridge programs?

Impacts
- Do summer bridge programs reduce the need for developmental education, and improve college outcomes over and above how students perform without these programs?
# Participation and Attrition

<table>
<thead>
<tr>
<th>College</th>
<th>Students in Program Sample</th>
<th>Control</th>
<th>Number of Students Who Ever Attended Program</th>
<th>Number of Students Who Completed Program</th>
<th>Percentage Enrolled at End of Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso</td>
<td>165</td>
<td>108</td>
<td>139</td>
<td>138</td>
<td>99%</td>
</tr>
<tr>
<td>Lone Star-CyFair</td>
<td>75</td>
<td>48</td>
<td>65</td>
<td>64</td>
<td>98%</td>
</tr>
<tr>
<td>Lone Star-Kingwood</td>
<td>51</td>
<td>35</td>
<td>51</td>
<td>41</td>
<td>80%</td>
</tr>
<tr>
<td>Palo Alto</td>
<td>52</td>
<td>35</td>
<td>52</td>
<td>35</td>
<td>67%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>89</td>
<td>58</td>
<td>58</td>
<td>47</td>
<td>81%</td>
</tr>
<tr>
<td>St. Phillips</td>
<td>153</td>
<td>102</td>
<td>146</td>
<td>139</td>
<td>95%</td>
</tr>
<tr>
<td>South Texas</td>
<td>83</td>
<td>54</td>
<td>72</td>
<td>63</td>
<td>88%</td>
</tr>
<tr>
<td>TAMIU</td>
<td>126</td>
<td>85</td>
<td>113</td>
<td>111</td>
<td>98%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>793</td>
<td>525</td>
<td>689</td>
<td>638</td>
<td>93%</td>
</tr>
</tbody>
</table>
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
IMPACT FINDINGS

Texas Developmental Summer Bridge programs:

- Did not impact college enrollment.
- Did not impact credits earned over 2 years.
- Accelerated students’ initial progress through the developmental course sequence in the first year.
### Key Outcomes after Two Years

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Program Group</th>
<th>Control Group</th>
<th>Difference (Impact)</th>
<th>p value</th>
<th>Std Error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cumulative Measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semesters registered at any college</td>
<td>3.3</td>
<td>3.4</td>
<td>-0.1</td>
<td>0.37</td>
<td>0.1</td>
</tr>
<tr>
<td>Total credits attempted</td>
<td>30.3</td>
<td>30.3</td>
<td>0.0</td>
<td>0.98</td>
<td>1.2</td>
</tr>
<tr>
<td>College-level credits</td>
<td>24.2</td>
<td>23.5</td>
<td>0.7</td>
<td>0.54</td>
<td>1.1</td>
</tr>
<tr>
<td>Developmental credits</td>
<td>6.1</td>
<td>6.7</td>
<td>-0.6*</td>
<td>0.09</td>
<td>0.4</td>
</tr>
<tr>
<td>Total credits earned</td>
<td>19.4</td>
<td>19.9</td>
<td>-0.5</td>
<td>0.59</td>
<td>1.0</td>
</tr>
<tr>
<td>College-level credits</td>
<td>15.9</td>
<td>15.9</td>
<td>0.0</td>
<td>0.97</td>
<td>0.9</td>
</tr>
<tr>
<td>Developmental credits</td>
<td>3.5</td>
<td>4.0</td>
<td>-0.6**</td>
<td>0.03</td>
<td>0.3</td>
</tr>
<tr>
<td>Passed first college-level math course</td>
<td>46.5</td>
<td>43.0</td>
<td>3.5</td>
<td>0.19</td>
<td>2.7</td>
</tr>
<tr>
<td>Passed first college-level reading course</td>
<td>72.6</td>
<td>71.6</td>
<td>1.0</td>
<td>0.68</td>
<td>2.4</td>
</tr>
<tr>
<td>Passed first college-level writing course</td>
<td>71.7</td>
<td>68.3</td>
<td>3.3</td>
<td>0.18</td>
<td>2.5</td>
</tr>
<tr>
<td>Sample size (total = 1,318)</td>
<td>793</td>
<td>525</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STUDENTS PASSING COLLEGE-LEVEL MATH (CUMULATIVE)
STUDENTS PASSING COLLEGE LEVEL READING (CUMULATIVE)

Passed first college-level reading course

Program Group  Control Group

Fall 2009  Spring 2010  Summer 2010  Fall 2010  Spring 2011
Students passing college level writing (cumulative)

Passed first college-level writing course

- Fall 2009
- Spring 2010
- Summer 2010
- Fall 2010
- Spring 2011

Program Group
Control Group

* Significant difference
** Highly significant difference
COST STUDY

- Sites varied in terms of program duration, intensity, and enrollment
  - Enrollment was the largest driver of costs
  - Average cost of program $1291

- Break even analysis
  - Additional number of college credits program group students *would have had* to earn for the program to “break even”
  - Society’s “Willingness to Pay” (WTP) for a college credit is $338 (from IPEDS data)
  - Avg. Cost of program/WTP for a credit
  - $1,291/$338 = 3.8 additional college level credits
Programs accelerated students’ progress into college math and writing in the first year.

Similar programs could continue to be offered to achieve this impact, and/or similar approaches could be implemented at high schools for rising seniors.
Quicker progress into college math and writing did not lead to increased cumulative college credits.

Additional supports, programs or approaches in subsequent terms (and/or partnerships with high school interventions) may be needed to impact longer term outcomes.
Programs did not impact college enrollment or persistence for these students who were likely motivated to attend college.

Students less likely to attend college might have different enrollment experiences.
Programs were relatively expensive to run

Funding sources matter; funds may be available in existing funding streams for developmental courses, reducing the net cost to college
MORE INFORMATION

Download event materials and learn more at

www.PostsecondaryResearch.org

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