Stepping Up to College Success in Hawai‘i

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Overview

- The Step Up Scholars Program
- Research Questions
- Methodology
- Results
- Discussion
- Limitation
- Sensitivity Analysis
- Conclusion
Taking the more rigorous coursework required of the BOERD will prepare students to successfully enter and complete postsecondary.
Components of the Program

- **Campaign** to encourage students to pledge to earn the BOERD

- **Materials**, sent home, about the requirements of the BOERD and applying for college and financial aid

- **Incentives** for students who earned the BOERD
Research Questions

For students in the graduating classes of 2013, 2014, and 2015, what is the impact of the Step Up Scholars Program on:

- High school graduation with a regular diploma or BOERD?
- College enrollment at a four-year or two-year college?
- First-to-second-year college persistence?
Examining a Potential Mechanism

For students in the graduating classes of 2013, 2014, and 2015, what is the impact of the Step Up Scholars program on:

- Earning credit in Algebra II or beyond?
- Earning credit in any AP course?
Methodology

- Quasi-experimental methodology
- Overlap in propensity scores

![Box plot comparing Step Up Scholars and Comparison group on propensity scores.](image)
## Methodology

### Weighting using propensity scores

<table>
<thead>
<tr>
<th>Hawai‘i State Assessment score</th>
<th>Unweighted sample</th>
<th>Weighted sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eighth-grade reading</td>
<td>320.99</td>
<td>313.93</td>
</tr>
<tr>
<td>Eighth-grade math</td>
<td>313.60</td>
<td>304.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Unweighted sample</th>
<th>Weighted sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>57%</td>
<td>49%</td>
</tr>
<tr>
<td>Male</td>
<td>43%</td>
<td>51%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program participation</th>
<th>Unweighted sample</th>
<th>Weighted sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible for free or reduced-price lunch (eighth grade)</td>
<td>45%</td>
<td>49%</td>
</tr>
<tr>
<td>Had an English language learner status (eighth grade)</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Had an individualized education program (eighth grade)</td>
<td>6%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Results: Graduation!

- A Step Up Scholar’s likelihood of graduating from high school was 2.0 times greater than that of a non-Scholar.

- A Step Up Scholar’s likelihood of earning the BOERD was about 2.3 times greater than that of a non-Scholar.
Results: College Enrollment and Persistence

- Step Up Scholars were also 1.8 times more likely to enroll in a two-year college, and about 2.6 times more likely to enroll in a four-year college, than non-Scholars.

- Step Up Scholars who attended a four-year college were 1.5 times more likely to persist to the second year, and Step Up Scholars who attended a two-year college were 1.3 times more likely to persist.
Results:
Advanced Math & AP Credits

- Step Up led to a 0.25 credit increase in advanced math courses (Algebra II or higher)
- Step Up led to a 0.7 credit increase in AP coursework.
Why Such Large Effects?

- Timing and content of information

“Nudges can help students overcome their attentional failure by providing reminders that are well-timed to correspond to the windows of opportunity during which students would optimally focus on particular tasks. Well-timed nudges may actually serve to capitalize on students’ relative impulsivity, encouraging them to make progress with a particular task in the moment rather than putting it off to an unspecified future time. Thus, there may be promise in low-touch nudges and reminders to support students both to and through postsecondary education.” (Page & Scott-Clayton, 2016, p. 13)
Why Such Large Effects?

Materials sent home

“How Step Up has impacted me is that when Step Up mails things to students, they come to me to talk about it and I can get students to do things I have been telling them over and over to do but they never do. It is helpful for them to hear it from an outside source. **It is better that they get the information right at home.**

-HI high school counselor
Limitations

- Some characteristics (such as motivation) are difficult to capture and measure, and we cannot account for them in the statistical models.

- Differences in high school and postsecondary outcomes may be due to these unmeasured differences in Scholars and non-Scholars rather than to the Step Up Scholars Program itself.
Sensitivity Analysis

Percentage of cases that need to be replaced to change the inference to a nonstatistical finding:

Requires 92% of the cases to have a zero effect to change the inference.

Threshold set at $P = 0.05$, $Z = 0.16$
Report and brief are available online:

Mahalo for your attention

Questions?