Improving College Pathways in California

November 28, 2017

Niu Gao and Hans Johnson

This event is supported with funding from the James Irvine Foundation and the Leona M. and Harry B. Helmsley Charitable Trust. The research is supported with funding from the Dirk and Charlene Kabcenell Foundation, the Evelyn & Walter Haas, Jr. Fund, the James Irvine Foundation, the Leona M. and Harry B. Helmsley Charitable Trust, and the Sutton Family Fund.
Too few California high school students complete college

- Across demographic groups, demand for college is very strong
- But 70 percent of California 9th graders will not earn a bachelor’s degree
- Lack of progression on the college pathway is a problem at every stage
  - Last two years of high school and first two of college are critical
- More improvements are needed for underrepresented groups
Most students do not finish a-g course sequences in high school

- Only 20 percent of the high school graduates in our sample completed a–g sequences
- Completion rates lower among students historically underrepresented in higher education
- Math and English are critical to a–g completion
  - Just 36 percent completed English requirements with a C or better
  - 42 percent completed math requirements with a C or better
- Grades 11 and 12 are key exit points from a–g courses
Even well-prepared students do not progress

Share of students who progress to the next a–g math course

- Among students passing previous math course
- Among students passing previous math course with an A or B

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>% of Students Passing Previous Course</th>
<th>% of Students Passing Previous Course with an A or B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra I to geometry</td>
<td>66%</td>
<td>69%</td>
</tr>
<tr>
<td>Geometry to algebra 2</td>
<td>59%</td>
<td>68%</td>
</tr>
<tr>
<td>Algebra 2 to higher math</td>
<td>47%</td>
<td>59%</td>
</tr>
</tbody>
</table>
Progression problems leave underrepresented students farther behind

Share of students progressing to the next level a–g math course

- Algebra 1 to geometry
  - Asian American: 80%
  - African American: 66%

- Geometry to algebra 2
  - Asian American: 74%
  - African American: 52%

- Algebra 2 to higher math
  - Asian American: 64%
  - African American: 38%
In college, high school preparation is key

- Remedial education is one the largest roadblocks to student success at community college
- Taking a–g courses in high school reduces students’ likelihood of taking remedial courses
  - Grades in and number of a–g courses matter a lot
Among prepared students, placement is a concern

Share of well-prepared community college students placed in remedial courses

- Female: 21%
- Male: 15%
- Asian American: 21%
- African American: 13%
- Latino: 18%
- White: 19%
- Low Income: 17%
- First Generation: 14%
CSU capacity is a problem

Number of eligible students denied admission

<table>
<thead>
<tr>
<th>Year</th>
<th>CC Transfers</th>
<th>First time freshmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>8,215</td>
<td>14,343</td>
</tr>
<tr>
<td>2014</td>
<td>10,252</td>
<td>16,447</td>
</tr>
<tr>
<td>2015</td>
<td>8,792</td>
<td>19,024</td>
</tr>
<tr>
<td>2016</td>
<td>8,149</td>
<td>19,406</td>
</tr>
</tbody>
</table>

# of denied eligibles
Persistence in the first two years at CSU is critical

Share of students who drop out of CSU

- All
- Female
- Male
- African American
- Latino
- Asian American
- White
Policy recommendations

- Increase the number of a–g approved courses
- Update high school graduation requirements
- Develop better placement systems
  - Consider “nudges” in high schools
  - Incorporate high school records in community college
- Establish more effective academic counseling and support systems
- Expand access to CSU and UC
- Establish a statewide longitudinal K–20 database
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These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.