Milestones, Indicators, and Student Supports for Postsecondary Success

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College Board Colloquium
January 13, 2014
Key Topics

• California Community College (CCC) context, but findings are relevant for IHEs interested in recruiting a diverse student body/transfer students.

• Origin and advantages of new indicator framework.

• Closer look at gaps by race/ethnicity.

• Relevance to policy and practice.
Traditional Measures to Understand Student Progression are Insufficient

- Generally focused on persistence and graduation rates, and transfer for community colleges
- Little information about:
  - Where and why students experience problems
  - What IHEs can do to help students (particularly at IHEs with scarce resources and many students who need high touch supports)
A Framework for Better Analysis

Two components (based on literature review)

• **Milestones** – to better understand the problem
  – measurable, intermediate educational achievements that students reach along the path to degree completion

• **Success Indicators** – to point to solutions
  – academic patterns that predict the likelihood that students will reach milestones
<table>
<thead>
<tr>
<th>Milestones</th>
<th>Success Indicators</th>
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<tbody>
<tr>
<td>• Retention</td>
<td><strong>Remediation:</strong></td>
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<tr>
<td>• Complete needed remediation</td>
<td>• Begin coursework in first term</td>
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<tr>
<td>• Transition to college-level coursework</td>
<td><strong>Gateway Courses:</strong></td>
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<tr>
<td>• Earn one year of college-level credits</td>
<td>• Complete college-level math/English in the first year or two</td>
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<tr>
<td>• Complete general education (GE)</td>
<td>• Complete a college success course</td>
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<tr>
<td>• Complete a community college transfer curriculum</td>
<td><strong>Credit Accumulation and Related Academic Behaviors:</strong></td>
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<tr>
<td>• Transfer from community college to university</td>
<td>• High rate of course completion</td>
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<tr>
<td>• Without completing curriculum</td>
<td>• Complete 20-30 credits in first year</td>
</tr>
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<td>• After completing curriculum</td>
<td>• Earn summer credits</td>
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<tr>
<td>• Complete certificate or degree</td>
<td>• Enroll full-time</td>
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<td>• Enroll continuously w/out stopping out</td>
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<td>• On-time registration for courses</td>
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<td>• Maintain adequate academic performance</td>
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California Community Colleges Analysis

Cohort for *Steps to Success*

- All first-time credit students in 2000-01, tracked over 7 years
- Subset of “degree seekers” (> 6 units in year 1); 63% of total
- N = 247,493
- Limitations – no info on SES, academic preparation

Data Files
1. Student information
2. Course enrollments over the 7 years, by term
3. Course information
4. Degrees, certificates awarded within that period
5. Transfers to universities within that period
6. Financial aid (fee waiver)
Milestones Point to Where Student Progress Stalls

Lower retention to second term than to second year

Many students lost between 12 and 30 credits

Some students who complete 30 credits don’t transfer/earn credential

Very few sub-baccalaureate credentials

Percent Achieving Milestone

- Retained 2nd Term: 74.0%
- Retained 2nd Year: 58.0%
- 12+ CL Credits: 62.2%
- 30+ CL Credits: 41.8%
- Transfer Curriculum: 16.7%
- Certificate: 3.3%
- Assoc. Degree: 7.9%
- Transferred: 22.7%
- Any Completion: 28.6%
Latino and Black Students Less Likely than White and Asian Students to Reach Milestones

Note: students can be double-counted in the certificate, associate degree, and transfer measures
### Student Success Course Completion

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Retention to 2(^{nd}) year</td>
<td>73%</td>
<td>54%</td>
</tr>
<tr>
<td>Earn 12+ college-level credits</td>
<td>77%</td>
<td>58%</td>
</tr>
<tr>
<td>Earn 30+ college-level credits</td>
<td>59%</td>
<td>37%</td>
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</table>
Regression Analysis Confirms Relationships

• Success indicators predict completion after controlling for:
  ▪ Age, gender, race/ethnicity
  ▪ Academic preparation
  ▪ Financial aid receipt
  ▪ Institutional effects

• Significant predictors when applied just to specific groups (older students, racial/ethnic groups)

• *IHEs can affect these academic and course-taking patterns.*
Digging Deeper into Problems Can Point to Solutions

All Degree Seekers (N=247,493)

- Completed CL Math Course within 2 Yrs: 41,808 (17%)
- Did Not Complete CL Math Course within 2 Yrs: 205,685 (83%)

No Math Courses Taken within 2 Yrs: 105,148 (51%)
- Enrolled in at Least One Math Course: 100,537 (49%)
  - Enrolled Only in Remedial Math: 64,412 (64%)
  - Enrolled in CL Math: 36,125 (36%)

Policies and practices related to assessment/placement, advising and registration processes, course scheduling

Policies and practices related to innovative methods of remedial course design and delivery

Policies and practices related to course dropping and repeats, academic assistance

On average, these students:
- Enrolled in 2 CL math courses in 2 yrs
- Dropped 65%
- Failed 35%
## Some Examples of Applying Results to Changing Policy and Practice

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<th>Problem Identified</th>
<th>Possible Changes</th>
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<td>Low percentage of developmental education students completing remediation</td>
<td>• Require early enrollment in remedial coursework</td>
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<td>• Redesign developmental courses</td>
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<td>• Contextualized developmental ed for career technical programs</td>
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<td>Low percentage of students completing math early</td>
<td>• Partner with high schools to improve college readiness</td>
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<tr>
<td></td>
<td>• Early advising that focuses on importance of taking math early</td>
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<td>• New approaches to math instruction</td>
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<td>Low percentage of students reach a threshold of credit accumulation in the first year</td>
<td>• Increase financial aid to encourage full-time attendance</td>
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<td>• Increase use of college success courses, early advising, etc.</td>
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<td>• Charge lower per-credit fees for enrolling in a full-time credit load</td>
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<td>Relatively low rate of completing courses (i.e., many course drops and failures)</td>
<td>• Allocate portion of funding on course completion in addition to census enrollment</td>
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<td>• Early alert systems and improved tutoring services</td>
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<td>• Limit course drops and repeats and late registration</td>
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Experimentation with Student Support-related Practices

- Integrating students supports into academics
- Accelerating/modularizing developmental education
- Creating more structured programs of study with embedded supports
- Providing early alerts to students
- Mandatory services
IHELP Contact Information

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