Pre-Conference Session: Equity Data and Current Research in Equity

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Equity and data. Data and equity
(a small sample of what I am inflicting on my colleges)

### CAMPUS-BASED RESEARCH: COURSE COMPLETION

B. COURSE COMPLETION. The ratio of the number of credit courses that students, by population group, complete compared to the number of courses in which students in that group are enrolled on the census day of the term.

<table>
<thead>
<tr>
<th>Target Population(s)</th>
<th># of courses students enrolled in &amp; were present in on census day in base year</th>
<th>The # of courses in which students earned an A, B, C, or credit out of &lt;=</th>
<th>The % of courses passed (earned A, B, C, or credit) out of the courses students enrolled in &amp; were present in on census day in base year</th>
<th>Total (all student average) pass rate*</th>
<th>Comparison to the all student average (Percentage point difference with +/- added)</th>
<th>Number of course successes needed to close current gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaska Native</td>
<td>164</td>
<td>113</td>
<td>69%</td>
<td>72%</td>
<td>-3%</td>
<td>5</td>
</tr>
<tr>
<td>Asian</td>
<td>15,250</td>
<td>11,521</td>
<td>76%</td>
<td>72%</td>
<td>4%</td>
<td>1,174</td>
</tr>
<tr>
<td>Black or African American</td>
<td>11,200</td>
<td>6,884</td>
<td>61%</td>
<td>72%</td>
<td>-10%</td>
<td>899</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>28,788</td>
<td>19,814</td>
<td>69%</td>
<td>72%</td>
<td>-3%</td>
<td>57</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific Islander</td>
<td>558</td>
<td>344</td>
<td>62%</td>
<td>72%</td>
<td>-10%</td>
<td>57</td>
</tr>
<tr>
<td>White</td>
<td>29,195</td>
<td>22,229</td>
<td>76%</td>
<td>72%</td>
<td>4%</td>
<td>57</td>
</tr>
<tr>
<td>Undeclared/Some other race</td>
<td>7,622</td>
<td>6,112</td>
<td>80%</td>
<td>72%</td>
<td>8%</td>
<td>57</td>
</tr>
<tr>
<td>More than one race</td>
<td>7,366</td>
<td>5,035</td>
<td>68%</td>
<td>72%</td>
<td>-4%</td>
<td>265</td>
</tr>
<tr>
<td>All Students</td>
<td>100,543</td>
<td>72,052</td>
<td>*</td>
<td>72%</td>
<td>-1%</td>
<td>566</td>
</tr>
<tr>
<td>Males</td>
<td>47,498</td>
<td>33,608</td>
<td>71%</td>
<td>72%</td>
<td>-1%</td>
<td>566</td>
</tr>
<tr>
<td>Females</td>
<td>51,003</td>
<td>37,271</td>
<td>73%</td>
<td>72%</td>
<td>1%</td>
<td>566</td>
</tr>
<tr>
<td>Unknown Gender</td>
<td>1,642</td>
<td>1,172</td>
<td>71%</td>
<td>72%</td>
<td>-1%</td>
<td>9</td>
</tr>
<tr>
<td>Current or former foster youth</td>
<td>3,697</td>
<td>2,312</td>
<td>63%</td>
<td>72%</td>
<td>-9%</td>
<td>348</td>
</tr>
<tr>
<td>Individuals with disabilities</td>
<td>4,793</td>
<td>3,429</td>
<td>72%</td>
<td>72%</td>
<td>0%</td>
<td>20</td>
</tr>
<tr>
<td>Low-income students</td>
<td>45,687</td>
<td>32,402</td>
<td>71%</td>
<td>72%</td>
<td>-1%</td>
<td>469</td>
</tr>
<tr>
<td>Veterans</td>
<td>2,255</td>
<td>1,624</td>
<td>72%</td>
<td>72%</td>
<td>0%</td>
<td>566</td>
</tr>
<tr>
<td>English as a Second Language (ESL)</td>
<td>678</td>
<td>533</td>
<td>79%</td>
<td>72%</td>
<td>7%</td>
<td>566</td>
</tr>
</tbody>
</table>

*The all student average is proposed as the comparison point for all groups. Therefore, this rate would be written in all of the yellow boxes and used to calculate the equity gap for each group.

The lack of decimals may cause rounding error.

**Rate of Course Completion**
- **Denominator:** Number of enrollments with grade of A, B, C, D, F, P, NP, I, IPP, INP, FW, W, DR
- **Numerator:** Number of enrollments with grade of A, B, C, P, I, A, B, C, IPP

**Notes on Special Populations:**
- **Foster Youth:** If a student is identified as foster youth on either their college application or on a FAFSA (Financial Aid) application they are counted in this group.
  - **Individuals with disabilities:** Any student identified as having an active disability with DSQP (Disabled Students Programs & Services) in 2014FA is counted in this group. This will include students identified as having any level of disability registered with DSQP (primary, secondary, etc.)
- **Low-income students:** Any student receiving any type of financial aid including loans, grants, waivers and scholarships in 2014FA is counted in this group.
- **Veterans:** Any student that has registered themselves as a veteran with Admissions & Records (ever) is counted in this group. This includes active veterans, those ever receiving veteran benefits or any dependents of a veteran.
- **English as a Second Language:** Any student enrolled in an ESL course in 2014FA is counted in this group. (Success rates reported for the ELS population capture student performance in both ESL courses and all other courses.)
It’s all about the story

“In most dialogues about research people are probably not going to walk away with good recall of your numbers. They will, however, remember a compelling story. The data are important and serve to confer credibility to your claims and validate the story, but the story is paramount”

-Gregory Stoup
It’s all about the story

Data + Story = engagement

- Story = memory task
Pre-Conference Session: Equity Data and Current Research in Equity

... which I will attempt to make interesting & compelling without showing any actual data
Equity has many dimensions

Mandated in Equity Reports
1. Ethnicity / race
2. Gender
3. Age
4. Foster Youth
5. Veterans

Other populations we are starting to collect data on:
1. Sexual orientation
2. First generation status
3. Socioeconomic status
4. English learners
5. Others
What does equity success look like?

Shrinking the equity or achievement gap sounds straightforward, but it can manifest itself in very different ways.
Scenario #2: Rising Tide

Rising Tide interventions help all groups equally.

Average Success Rate increases but the Achievement Gap remains unchanged.
Scenario #3: Zero-Sum

Average Success Rate remains unchanged but the Achievement Gap decreases.

Zero-Sum interventions help the bottom but harm the top.
Scenario #4a: **Bottom-up**

Average Success Rate increases and the Achievement Gap decreases.

**Bottom-up interventions** help the bottom and hold the top harmless.
Scenario #4b: **Win-Win**

- **Win-Win interventions** help everyone but raise the bottom more than the top.
- Average Success Rate increases substantially and the Achievement Gap decreases.
What’s the best way to frame the challenge?

Improving equity ≠ closing the achievement gap

Improving equity = Bringing up the bottom
Look at the statewide patterns

Colleges with the largest gaps tend to have high performance at the top
Think in terms of sources of variation

Service Area Population

Factor A

Factor B

Factor C

Factor D

Obtain Completion Credential
Where do the inequities emerge on the path to completion?

Preliminary findings from one large California District

| Service Area Population | Enroll at Community College | Assess as College Ready | Credential Seeking Course Taking | Sufficient Academic Performance | Obtain Completion Credential |

* Figures represent of the explained variation from the model
Inequities in access have been reduced

Preliminary findings from one large California District

Not much inequity is observed through the lens of our traditional access measure.

With regard to student race/ethnicity we have been largely successful in closing the access gap.

* Figures represent of the explained variance in completion
Let’s start by looking at preparedness

Preliminary findings from one large California District

Q: Are our assessment and placement practices and actual student preparedness contributing to the inequities in outcomes?
The preparedness challenge

“College preparedness is the major determinant of inequities in educational attainment”

-Equity & Excellence in American Higher Education by Bowen, Kurzweil & Tobin
Consider the scale of the underprepared population

Note: the State Chancellor’s Office defines unprepared as any completion oriented student whose first course in math or English was below transfer level.
The unprepared are not homogeneous

Completion Pathway

Unprepared students

- Basic Skills course work

Prepared students

- College level course work
Likelihood of completing the basic skills math sequence given the student’s initial placement

Percentage of students completing college–level math within three years of initial placement and based on their level of placement

* Data source: The Basic Skills Cohort Tracker. Data are averages for a Fall 2011 cohort pulled from a sample of California Community Colleges that included all colleges for which the Cohort Tracker had sufficient data over the examined period.
A big part of our equity challenge is lurking in the placement of students. What percent place 3 or 4 levels below?

<table>
<thead>
<tr>
<th></th>
<th>4 Levels Below</th>
<th>3 Levels Below</th>
<th>2 Levels Below</th>
<th>1 Level Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian &amp; White</td>
<td>X%</td>
<td>2X%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Af American &amp; Hispanic</td>
<td></td>
<td>%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* This data reflect the distribution for the developmental math sequence only.
“Many students who fail to complete their basic skills sequence do so without failing or withdrawing from a course. They either never show up for their remedial course or do not return after completing a course in the lower part of the sequence.”

-Redesigning America’s Community Colleges by Bailey, Jaggars & Jenkins
The preparedness challenge

To make any significant progress in closing the achievement gap, colleges must address the preparedness challenge.

Most of the best practices promoted in the literature are effective primarily for prepared populations only.

Some promising practices that address unpreparedness:

1. Multiple Measures placement
2. Placement prep programs
3. Acceleration models
Let’s now look at pathway completion

Q: Are some populations wondering off their pathways and lengthening their time to degree more than others?

We need to place some sustained attention on pathways and milestone completion.
Now let’s look at pathway patterns (& some numbers)

Examination of first 30 units earned by degree recipients within four highly enrolled programs at the Contra Costa Community College District

<table>
<thead>
<tr>
<th></th>
<th>Average # of Units Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Dev Ed Units</td>
</tr>
<tr>
<td>Asian &amp; White Students</td>
<td>same</td>
</tr>
<tr>
<td>African-American &amp;</td>
<td>same</td>
</tr>
<tr>
<td>Hispanic Students</td>
<td></td>
</tr>
</tbody>
</table>

The four degree programs examined were Liberal Arts: Social & Behavioral Sciences; Liberal Arts: Math & Science; Liberal Arts: Arts & Humanities; AS in Business Administration.
Let’s look at pathway progression

**Prepared Students**

- **Starting Cohort**: First-time students with a minimum of 6 units earned within six years who also attempted any Math or English in the first three years*
- **Earning 30 Units**: Students earning 30 Transferable / Degree-Applicable Units
- **Completion**: Students achieving a certificate, degree, transfer to a four-year or achieve transfer-prepared status within six years of entry:

**Unprepared Students**

- **Starting Cohort**:
- **Earning 30 Units**
- **Completion**

*about 30% of first-time students statewide meet the starting cohort requirements
There is a significant drop in both the prepared & unprepared student populations attempting to achieve 30 earned units of instruction.

However, the road from the 30 unit milestone to completion is much more challenging for unprepared students.
Part of the answer: time to degree

For prepared CCC students, the median time to degree is \( x \) years

The typical unprepared student has accumulated roughly two-thirds of the necessary units in that amount of time and requires \( Y \) additional years to complete.
“National studies have noted that students tend to earn developmental credits at the expense of earning college-level credits, and never quite catch up to their peers in terms of the number of college-level credits they earn.”

-Redesigning America’s Community Colleges
by Bailey, Jaggars & Jenkins
Evidence from one CCC District

African-American  Asian  Filipino  Hispanic  White  Other

# in Starting Cohort  # Earning 30 Units  # Completing  # in Starting Cohort  # Earning 30 Units  # Completing

Prepared Students  Unprepared Students
Evidence from one CCC District

- African-American
- Asian
- Filipino
- Hispanic
- White
- Other

# in Starting Cohort | # Earning 30 Units | # Completing | # in Starting Cohort | # Earning 30 Units | # Completing

Prepared Students

Unprepared Students

Modest inequity

Significant inequity
Evidence from one CCC District

Most of the inequality in overall student completion occurs in this transition from 30 units to completion for unprepared students.
Let’s turn our attention to course success

Q: Are there significant variations in academic performance that seem to be impacting completion?
Traditional approaches aren’t always working as well as we think they are.

A growing body of evidence suggests that the lecture is not generic or neutral, but a specific cultural form that favors some people while discriminating against others, including women, minorities and low-income and first-generation college students. This is not a matter of instructor bias; it is the lecture format itself — when used on its own without other instructional supports — that offers unfair advantages to an already privileged population.

Brilliant: The New Science of Smart
Annie Murphy Paul
Traditional approaches aren’t always working as well as we think they are

“Among students with comparable skills, students of color got less of a return on those skills when exposed to traditional models of instruction and support”

-Whistling Vivaldi by Claude M Steele

Some promising win-win practices:

1. Flipped classroom
2. California Acceleration Project
3. Multiple Measures assessment
4. Student Support (Re)defined strategies
Flipped classrooms are generating **win-win** results
The California Acceleration project and Multiple Measures are also demonstrating **win-win** outcomes.
Student Support (Re)defined has unearthed some practices that have **win-win** potential.

Defining the “Six Success Factors”

A growing body of evidence indicates that strategic supports—delivered inside and outside the classroom—can increase students’ abilities to achieve completion and transfer. This research suggests that student support activities must be (1) integrated into students’ daily experience and (2) included in the overall curriculum. The RP Group’s review of leading studies on student support found that effective support—in addition to being integrated and intrusive—helps students become:

- **Directed:** students have a goal and know how to achieve it
- **Focused:** students stay on track—keeping their eyes on the prize
- **Nurtured:** students feel somebody wants and helps them to succeed
- **Engaged:** students actively participate in class and extra-curricular activities
- **Connected:** students feel like they are part of the college community
- **Valued:** students’ skills, talents, abilities and experiences are recognized; they have opportunities to contribute on campus and feel their contributions are appreciated

“Research in psychology has found that student academic performance is enhanced by a feeling of belonging — a sense of being included — that minority, low-income, and first-generation students often acutely lack when encountering institutions of higher education.”

Brilliant: The New Science of Smart
Annie Murphy Paul
Unique Findings for African-American and Latino Students

• Both were more likely to be report spending their time outside of class on campus alone

• Both were more likely to indicate that not passing a class as a very good reason not to re-enroll

• African-American students were more likely to say that having someone at the college who cared about them was a key motivating factor in their decision to return the following semester
“The twin goals of **equity** and **high quality education** have profound meaning for our society, and we **cannot permit one to yield to the other in principle or in practice.**”

- **Equity and Excellence in American Higher Education**
  by William Bowen, Martin Kurzweil & Eugene Tobin
In closing, something to consider from the scholarship on equity and race

Mandated in Equity Reports

1. Ethnicity / race
2. Gender
3. Age
4. Foster Youth
5. Veterans

Engaging the Race Question:
Accountability and Equity in U.S. Higher Education

When discussing race, groups frequently push to expand the conversation to include other groups i.e. low income, student w/ disabilities, GLBT, etc.

“... that can be a mistake. It can often dilute or deflect difficult conversations about race into safer arenas and groups never address the hard questions....the best approach might be to work to establish high levels of trust that then make it possible to have courageous conversations “
Thoughts, comments, reflections ...

Yours, not mine ;)
“The current equity challenge in higher education stems more from weakness of purpose, confusion of vision, underuse of talent, and lack of leadership than from conditions beyond our control.”
It has been a pleasure

Gregory M Stoup
Vice President, The RP Group Board
Senior Dean, Contra Costa Community College District
October, 2015
A few books, articles & monographs on equity

- **Equity and Excellence in American Higher Education** by William Bowen, Martin Kurzweil & Eugene Tobin
- **Basic Skills Education in Community Colleges** by Norton Grubb & Robert Gabriner
- **Engaging the Race Question: Accountability and Equity in U.S. Higher Education** by Alicia C. Dowd & Estela Mara Bensimon
- **Redesigning America’s Community Colleges: A Clearer Path to Student Success** by Thomas R. Bailey, Shanna Smith Jaggars, Davis Jenkins
- **Indicators of Higher Education Equity in the U.S.** by the Pell Institute
- **Whistling Vivaldi** by Claude Steele
- **Student Success in Community Colleges: A Practical Guide to Developmental Education** by The RP Group