Student Success: a focus on data

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What we’ll review today

1. Defining Student Success. What should Districts and Colleges focus on?

2. Using the Student Success Scorecard to support good decision making.

3. Implications for equity.

4. Effective ways to frame Scorecard data to the public.
Let’s begin with an irony

Over the last two decades evidence on student performance has become increasingly available and yet the pace of change has remained slow.

Why?
With all this data why are we still struggling?

1. Focusing on the wrong data

2. Using a one-size-fits-all framework
Are we looking at the right data?

At most community colleges these are the two most widely reported student performance measures.

FYI - our accreditors mandate that we set institutional standards and goals for these two measures.
Not a one-size fits-all world.
So how do we make better decisions in this environment?

1. Focusing on the wrong data

2. Using a one-size-fits-all framework

Track the performance of populations over which the college has influence
The universe of factors that influence student success

- Completely external factors
- What the college can influence indirectly or partially
- What the college can influence directly
The universe of factors that influence student success

Try to better understand so we can plan better

Try to increase our leverage

Work to make these ever more effective
The universe of factors that influence student success

With better information and creative thinking we can identify interventions that expand our spheres of influence.
So, what should we focus on?

Students pursue a wide variety of educational goals:

- **Transfer**
- **AA/AS Degree**
- **Certificate**

(50 – 70%)

- **Educational Development**
- **Basic Skills development**
- **4 Yr student taking class at 2-Yr**
- **Undecided**

(30 – 50%)

Let’s start by looking at completion
A simplified completion model

Our focus today

Consider two possible college goals:
1) To prepare students for the world
2) To maximize completion rates

These are not one and the same.
We already know a lot about what drives completion

- High Academic standards
- Quality instruction
- Engaging learning environment

Course success

Student satisfaction
- Effective support services
- Feeling of connection
- Engaging campus life
- Appreciation for value of education

Persistence
- Academic success
- Unit load
- Course taking pattern
- Dev Ed Acceleration programs
- Financial Aid
- Matriculation services
- Effective course scheduling

Completion
- Academic success
- Steady unit accumulation
- Faculty connection & support
- Friendly application process
Incidentally, completion is not strictly an economies of scale phenomena.

Correlation = .27
The Scorecard model

**momentum points**

- **Starting Cohort**
  - (Completion oriented students)

- **Persisting**
  - (3 terms: e.g. First Fall to next Spring to next Fall)

- **Earning 30 Units**
  - (Transferable / Degree-Applicable Units)

- **Completion**
  - (Degree, Certificate, Transfer)

...easy, peasy, lemon, squeezy ...

except, we first need to determine which students to include in that starting cohort bucket ...
More difficult to measure

Who should we count and for long should we count?

Easy to Quantify

\[
\frac{\text{# Students completing}}{\text{# Students pursuing completion}} = \% \text{ Students completing (Completion Rate)}
\]

The art of calculating completion
Why not simply ask students about their goals and track how many make it there?

The problem: data gathered on student goals when they apply to go to college are only loosely connected to their course taking behavior once in college.

Student Self-reported Goal

“\text{I want to transfer to a four-year College}”

This type of mismatch occurs with surprising frequency within the community college domain

Course selections for same student

First Term
- Gym course

Second Term
- Gym course

Should we count them as a transfer student?
Selecting cohorts

Rather than rely on self-reported goals, let’s look at the courses students actually take and then use their course taking behavior to categorize them.

Enter the Student Success Scorecard
Definition: The number of 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 ...

... who then achieved any of the following outcomes within six years of entry:

- Earned AA/AS or credit Certificate
- Transfer to four-year institution
- Achieved “Transfer Prepared” Status
Let’s give it some context

Total Number Enrolled Statewide: 2,772,400

Number that are First-time Students: 697,500

Students in the Starting Cohort: 194,050

Note: figures pertain to the 2007/08 academic year. * First-time students were estimated.

Number of first-time students that earned a minimum of 6 units who also attempted any Math or English in the first three years:

- ~ 7.0% of Headcount
- ~ 27.8% of First-time students*
Each cohort is given six years to complete. We add up all those competing each year to get the total number completing for the cohort and use that to calculate the completion rate.

The Scorecard provides a six year completion rate.
The deep breath before the plunge

Ok, we now know who we are counting & how long we are counting. Let’s see how many complete.
What the public sees

Two subpopulations with strikingly different experiences

The über metric
Five Year Completion Rate Trends

- So why is the overall trend line closer to the trend for underprepared students?
- Because most of our students – 74% statewide – are unprepared.
The relationship between college completion & student preparedness

In fact, the best predictor of college completion is the percent of prepared students in the starting cohort.
The relationship between college completion & student preparedness

College Completion Rates vs. Percent Prepared Students in Cohort

Correlation = .71
The Scorecard as a tool for inquiry

Some ideas for using the Scorecard to trigger important conversations.
Statewide Completion Rate Five Year Trend

The drop in the completion rate is due to a more rapid rise in the starting cohort enrollment than in the number completing.
What are the incentives for students?

The current Scorecard completion rate is a measure of students starting in 2007/08 and completing by 2012/13. Is it any wonder why the completion rate declined?
Let’s revisit our Scorecard model

**Question**: How many students make it to the halfway point and earn 30 units? And how many of them then complete?
Of those that didn’t complete, most failed to reach the 30 unit halfway point.

Let’s disaggregate and compare the prepared student to the unprepared student.
The big drop from starting cohort to the 30 unit point is common across both groups.

But moving from 30 units to completion is a challenge for the unprepared.

Why?
For prepared students, on average, this took 3.6 years.

In that same amount of time the average underprepared student is about here... and require an additional 1.2 years to complete.

Est. 75% of those not completing don’t have enough units to graduate.
Let’s pause for a moment

What have we discussed so far?

• We need to understand who is being counted & for how long
• The completion story is a tale of two populations
• The road to completion for the unprepared is long & daunting
• What about that large uncounted group?
Just a quick word on the uncounted

Total District Headcount: 2,772,400

First-time Students: 697,500

Students in the Scorecard Starting Cohort: 503,450

The hard to count group
( ~70% of first-time students )

Note: figures pertain to the 2006/07 academic year.
Another approach to counting students

California Community College Students

**Our success stories**
- Mostly transfer oriented & students exploring options
- Tend to enroll full-time
- Pass 73% of courses

**Our biggest challenge**
- Attend intermittently
- Tend to enroll part-time
- Pass only 26% of courses

**Our failures ???**
- On average take one course a year for two years and never return
- Pass 94% of their courses
- Rarely transfer or obtain credential
- Accrue some of the biggest wage gains

Source: WHAT’S COMPLETION GOT TO DO WITH IT? Using Course-Taking Behavior to Understand Community College Success
The Equity Equation

How to think about equity
College Completion Rates by Student Ethnicity

- **Asians**: 66% overall, 71% for prepared students, 65% for unprepared students.
- **Filipinos**: 66% overall, 71% for prepared students, 65% for unprepared students.
- **Hispanics**: 41% overall, 57% for prepared students, 44% for unprepared students.
- **Afr Americans**: 38% overall, 41% for prepared students, 35% for unprepared students.

Completion rates for prepared students:
- Asians: 81%
- Filipinos: 70%
- Hispanics: 64%
- Afr Americans: 34%
Note that the lowest performing Prepared group outperforms the highest performing Unprepared.
Preparedness level explains more of the variation in performance than student ethnicity.
# Equity and preparedness

<table>
<thead>
<tr>
<th>% of Students Unprepared</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asian</strong></td>
<td>64%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>66%</td>
</tr>
<tr>
<td><strong>Filipino</strong></td>
<td>74%</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td>85%</td>
</tr>
<tr>
<td><strong>Afr-American</strong></td>
<td>87%</td>
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</tbody>
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The more students that arrive unprepared, the lower their completion rate.
Most colleges have goals for raising overall completion and closing the achievement gap. Let’s look at the underlying assumptions required for effectiveness in both those areas...
Scenario #1: **Rising Tide**

*Rising Tide Scenario* emerges from interventions that help all groups equally.

**Overall Success**: Achievement Gap:

**Overall Average**: 77%

**Overall Average**: 70%

**Progress Summary**
Scenario #2: **Zero-Sum**

Zero-Sum Scenario emerges from interventions that help the bottom but harm the top.
Scenario #3a: **Bottom-up**

**Success by Cohort**

- **Average 70%**
- **Progress Summary**
  - **Overall Success:**
  - **Achievement Gap:** (improved)

**Bottom-up Scenario** emerges from interventions that help the bottom and hold the top harmless.

Legend:
- African-American
- Asian / Pac. Is.
- Filipino
- Latino
- White
- Other

(not actual data)
Scenario #3b: **Win-Win**

**Win-Win Scenario** emerges from interventions that help everyone but raise the bottom more than the top.
What does this tell us?

1. The Bottom-up and Win-Win scenarios are the only ones that get you higher completing and close the equity gap.

2. How should we frame the challenge:

- **First completion then equity**
  - We can work to raise the college completion rate and then try to make it more equitable.

- **First equity and we get completion**
  - We can pursue the equity outcome we want (Bottom-up or Win-Win) with the consequence being higher college completion rates.
What does this tell us?

For colleges pursuing higher completion and greater equity:

Strategies for improving overall college performance should emerge from strategies for closing the equity gap.
Wrapping it all up in one slide

- We work in an incredibly complex environment.

- Improvement will come from getting better at what we do and effectively expanding our spheres of influence.

- Our actions are likely to be smarter, better understood and more effective when we properly frame the issues.
Any final thoughts?
It has been a pleasure

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