Introduction

In the report ‘Advancing Student Success in the California Community Colleges’ (2012) the California Community Colleges Student Success Task Force (SSTF) made a series of recommendations to refocus efforts to promote student success. The Seymour-Campbell Student Success Act of 2012 (Senate Bill 1456) insured that these recommendations were signed into law. Among the recommendations was for the California Community Colleges (CCC) Chancellor’s Office, districts, and colleges to identify specific goals for student success and to report their progress toward meeting these goals (Recommendation 7.2). Senate Bill 195 was signed into law in 2013, requiring the three public segments of postsecondary education in California to “generally adhere to 3 specified goals and that appropriate metrics be identified, defined, and formally adopted to monitor progress toward the achievement of the goals.” The goals outlined in the law include; 1) improved access to higher education and success among underrepresented populations, 2) better alignment of degrees and credentials with the state’s economic needs, and 3) effective/efficient use of resources in providing high-quality education.

Some of the requirements set forth by the Task Force guided the process of determining specific goals as well as which metrics to be included. First, the Chancellor’s Office was required to establish an overarching series of statewide goals, in consultation with internal and external stakeholders. As such, the Scorecard Advisory Committee (Appendix A), comprised of subject-matter experts and stakeholders representing a variety of fields in the CCC system, was consulted in the development of system goals metrics. The expertise offered by this group was particularly invaluable because the Task Force requested that the system goals rely on measures included in the Scorecard (formerly known as ARCC), the recently developed accountability framework.

Goals Framework

The metrics cover five themes of student success reflecting core missions of CCCs: Student success, equity, student service, efficiency, and access.

The student success metrics directly measure the rate at which students attain an associate degree or certificate, or transfer to a four-year institution, an important purpose for students attending community colleges. The recent implementation of Associate Degree of Transfer program to ensure more efficient transfers from CCC to California State University is expected to improve transfer students’ success rate.

The framework for the system goals goes beyond monitoring student performance. Equity was mentioned by the Task Force in the report. Their suggestions included reporting Scorecard metrics for...
subgroups, or disaggregating college-level goals by race/ethnic subgroups. To capture the degree of equity, the system goals take into account the closing of persistent equity gaps among race/ethnicity subgroups. Inclusion of equity in the goals ensures that improvements in student success take place in an equitable manner, by colleges strategically targeting services and resources to disadvantaged subgroups. The 2014-15 California State Budget allocates additional $70 million of Student Success and Support Program (SSSP) funding solely for community colleges to engage in activities to close gaps in access and success among subgroups.

The Student Success Act of 2012 (SB 1456) implements the Task Force’s recommendations, among them were that all incoming students participate in assessment, orientation and development of a student education plan (Recommendation 2.2) and that the Student Support Initiative enhance student services by providing diagnostic assessments, orientation, and education planning (Recommendation 8.2). Section 78212 of the Education Code defines the new requirement for education planning as the “development of an education plan leading to a course of study and guidance on course selection that is informed by, and related to, a student’s academic and career goals.”

Efficiency was not specifically mentioned in the Student Success report; however, community colleges are increasingly pressed to demonstrate efficiency (Belfield, 2012) while the federal government has placed the goal of making college affordable within the top priorities of its higher education reform plan. These developments are consistent with new awareness of high costs associated with higher education, prompting community colleges to think more in terms of efficiency.

In 2013, SB 195 was signed establishing the three aforementioned statewide goals for the state’s three higher education systems, which included improving access. The CCC Student Success Task Force identifies the community colleges as “being the ‘gateway’ to opportunity for Californians of all backgrounds, including traditionally underrepresented economic, social, and racial/ethnic subgroups.” Further, providing universal access to higher education for Californians of all backgrounds is not the only benefit of including an access metric. By monitoring the trends in racial subgroups’ enrollment over years, the hope is that the system can maintain a balance between access and success (Bragg & Durham, 2012).

System Goals Metrics

Listed below are the system goals metrics along with the methodology of how targets are applied, grouped by the five overarching themes – student success, equity, student services, efficiency and access. Some themes include more than one metric. The data source is the Chancellor's Office Management Information System (COMIS) unless indicated otherwise.

It should be noted that this document describes the system goals metrics, without providing specific target values. Specific values displayed for some of the metrics are only examples, not actual targets for any given academic year.
STUDENT SUCCESS

1. Scorecard Degree/Transfer Completion Rate, Remedial Math and English Rates, and CTE (Career Technical Education) Completion Rate

These metrics come from the Student Success Scorecard published by Chancellor’s Office (http://scorecard.cccco.edu/scorecard.aspx). The Scorecard metrics are based on the success rates of cohorts, or a group of first-time students enrolled in the same academic year, followed for six consecutive years. The four metrics used for setting targets are briefly described below. For more information about Scorecard metrics, see the “Scorecard Data Specification” document found at: http://scorecard.cccco.edu/scorecarddocumentation.aspx.

- **Degree/Transfer Completion Rate (hereafter called Completion Rate)**
  The percentage of degree and/or transfer seeking first-time students, who succeeded in completing a degree, certificate, or transfer-related outcome within six years of entry

  This metric is reported separately for prepared and unprepared students. A student is considered ‘unprepared’ if he/she attempted remedial courses either in Math or English, as defined in the Scorecard.

- **Remedial Math Rate**
  The percentage of credit students who attempted a course designated at “levels below transfer” in Math and successfully completed a college-level course in Math within six years

- **Remedial English Rate**
  The percentage of credit students who attempted a course designated at “levels below transfer” in English and successfully completed a college-level course in English within six years

- **Career Technical Education Rate**
  The percentage of career technical (or vocational) education students, who succeeded in completing a degree, certificate, or transfer-related outcome within six years

**Metric Description:** For each Scorecard metric, a target is created and applied to each of the six cohorts that are within their 6-year follow-up period during the academic year that is to be evaluated. For example, the metrics for the academic year 2013/14 involve the following cohorts in the table (2008/09 to 2013/14 cohorts), with an ‘x’ indicating the performance for which a target is set.
For each of the six follow-up years, the annual success rate is calculated as the percentage of the students who attained the outcome within the year, of all students in the cohort. For metrics for which a student may have more than one outcome during the follow-up years (i.e. completion rate and CTE rate), only the outcome that was attained first was used for the calculation.

**Target:**

The target value for a cohort is based on the immediately preceding cohort’s (i.e. base cohort) success rate observed in the previous academic year. For example, the target for the 1st year for the 2013/14 cohort is based on the rate observed during the 1st year in the 2012/13 cohort. In this example, the 2012/13 cohort is considered the base cohort for the 2013/14 cohort.

The targeted increase is expressed as a percentage increase from the base cohort’s success rate. For instance, if the target is set at 2%, and if the success rate observed in the 2012/13 cohort during the 1st year is 3.5%, then the target rate for the 1st year of the 2013/14 cohort is 3.5% * 1.02 = 3.57%.

In the following paragraphs, how the target value is applied for each Scorecard metric is described.

1) Completion Rate

A long-term goal for the six-year completion rate may be set for a cohort first, and then an annual percent increase that is needed to achieve that long-term goal may be calculated.

In the Scorecard, the completion rate cohort is selected based on the student’s behavior during the first three years after enrollment. This means that a cohort’s performance data are not available until the end of the third year. This time lag poses a challenge in setting targets because in any given academic year the base cohort’s rates are not available for the first and second years. As a result, targets are set only for the third through sixth years’ completion rates.

Table 1 illustrates an example of using an annual target of 2.5% increase in the completion rate for the 2013/14 academic year.
Table 1.

<table>
<thead>
<tr>
<th>Cohorts for which targets are set in 2013/14 academic year</th>
<th>Years after enrollment</th>
<th>Base cohort</th>
<th>Data availability at time of setting goals for 2013/14</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09 cohort</td>
<td>6th year</td>
<td>2007/08 cohort</td>
<td>Yes</td>
<td>4.23</td>
</tr>
<tr>
<td>2009/10 cohort</td>
<td>5th year</td>
<td>2008/09 cohort</td>
<td>Yes</td>
<td>6.83</td>
</tr>
<tr>
<td>2010/11 cohort</td>
<td>4th year</td>
<td>2009/10 cohort</td>
<td>Yes</td>
<td>11.46</td>
</tr>
<tr>
<td>2011/12 cohort</td>
<td>3rd year</td>
<td>2010/11 cohort</td>
<td>Yes</td>
<td>15.39</td>
</tr>
<tr>
<td>2012/13 cohort</td>
<td>2nd year</td>
<td>2011/12 cohort</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>2013/14 cohort</td>
<td>1st year</td>
<td>2012/13 cohort</td>
<td>No</td>
<td>-</td>
</tr>
</tbody>
</table>

The same steps are taken by disaggregating the cohort by the student’s preparedness status, in order to monitor rates separately for the prepared and unprepared students.

2) Remedial Math Rate

For these remedial cohorts, it does not take students three years to qualify for inclusion. Table 2 illustrates an example of using an annual target of 2.5% increase in the rate for the 2013/14 academic year.

Table 2.

<table>
<thead>
<tr>
<th>Cohorts for which targets are set in 2013/14 academic year</th>
<th>Years after enrollment</th>
<th>Base cohort</th>
<th>Data availability at time of setting goals for 2013/14</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09 cohort</td>
<td>6th year</td>
<td>2007/08 cohort</td>
<td>Yes</td>
<td>1.49</td>
</tr>
<tr>
<td>2009/10 cohort</td>
<td>5th year</td>
<td>2008/09 cohort</td>
<td>Yes</td>
<td>2.05</td>
</tr>
<tr>
<td>2010/11 cohort</td>
<td>4th year</td>
<td>2009/10 cohort</td>
<td>Yes</td>
<td>3.44</td>
</tr>
<tr>
<td>2011/12 cohort</td>
<td>3rd year</td>
<td>2010/11 cohort</td>
<td>Yes</td>
<td>6.55</td>
</tr>
<tr>
<td>2012/13 cohort</td>
<td>2nd year</td>
<td>2011/12 cohort</td>
<td>Yes</td>
<td>13.88</td>
</tr>
<tr>
<td>2013/14 cohort</td>
<td>1st year</td>
<td>2012/13 cohort</td>
<td>Yes</td>
<td>8.05</td>
</tr>
</tbody>
</table>

3) Remedial English Rate

Table 3 illustrates an example of using an annual target of 2.5% increase in the rate for the 2013/14 academic year.
Table 3.

<table>
<thead>
<tr>
<th>Cohorts for which targets are set in 2013/14 academic year</th>
<th>Years after enrollment</th>
<th>Base cohort</th>
<th>Data availability at time of setting goals for 2013/14</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09 cohort</td>
<td>6th year</td>
<td>2007/08 cohort</td>
<td>Yes</td>
<td>1.53</td>
</tr>
<tr>
<td>2009/10 cohort</td>
<td>5th year</td>
<td>2008/09 cohort</td>
<td>Yes</td>
<td>2.06</td>
</tr>
<tr>
<td>2010/11 cohort</td>
<td>4th year</td>
<td>2009/10 cohort</td>
<td>Yes</td>
<td>3.45</td>
</tr>
<tr>
<td>2011/12 cohort</td>
<td>3rd year</td>
<td>2010/11 cohort</td>
<td>Yes</td>
<td>7.43</td>
</tr>
<tr>
<td>2012/13 cohort</td>
<td>2nd year</td>
<td>2011/12 cohort</td>
<td>Yes</td>
<td>20.35</td>
</tr>
<tr>
<td>2013/14 cohort</td>
<td>1st year</td>
<td>2012/13 cohort</td>
<td>Yes</td>
<td>14.71</td>
</tr>
</tbody>
</table>

4) CTE Rate

Table 4 illustrates an example of using an annual target of 2.5% increase in the rate for the 2013/14 academic year.

This metric suffers the same limitation as the completion rate in terms of data availability as it takes three years for students to qualify for the cohort of this metric. Consequently, targets are set only for years 3rd-6th.

Table 4.

<table>
<thead>
<tr>
<th>Cohorts for which targets are set in 13/14 academic year</th>
<th>Years after enrollment</th>
<th>Base cohort</th>
<th>Data availability at time of setting goals for 13/14</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09 cohort</td>
<td>6th year</td>
<td>2007/08 cohort</td>
<td>Yes</td>
<td>1.67</td>
</tr>
<tr>
<td>2009/10 cohort</td>
<td>5th year</td>
<td>2008/09 cohort</td>
<td>Yes</td>
<td>3.48</td>
</tr>
<tr>
<td>2010/11 cohort</td>
<td>4th year</td>
<td>2009/10 cohort</td>
<td>Yes</td>
<td>7.38</td>
</tr>
<tr>
<td>2011/12 cohort</td>
<td>3rd year</td>
<td>2010/11 cohort</td>
<td>Yes</td>
<td>12.33</td>
</tr>
<tr>
<td>2012/13 cohort</td>
<td>2nd year</td>
<td>2011/12 cohort</td>
<td>No</td>
<td>-</td>
</tr>
<tr>
<td>2013/14 cohort</td>
<td>1st year</td>
<td>2012/13 cohort</td>
<td>No</td>
<td>-</td>
</tr>
</tbody>
</table>

2. Annual Volume of Associate Degrees for Transfer awarded

The Student Transfer Achievement Reform Act (SB 1440, Padilla), signed into legislation on September 29, 2010, requires the California Community Colleges and California State University to collaborate on the creation of Associate in Arts for transfer (AA-T) and Associate in Science for transfer (AS-T) degrees.

**Metric Description:** The metric is the volume of Associate Degrees for Transfer awarded in each academic year.
Target: The target is set on the annual percent increase from the previous academic year in the volume of the Degrees for Transfer awarded. The existing data show a steep increase in the volume between the first and second year of implementation. If this trend continues, to increase the volume of the degrees by a target percent annually may not be sustainable. The Chancellor’s Office will monitor the trends and may reevaluate the target.

EQUITY

3. Equity in Completion Rate among Race/Ethnicity Subgroups

The equity index has been developed as a tool to measure the level of equity among race subgroups (Bensimon and Malcom-Piqueux, 2014), and it has also been applied in the context of higher education (Fox, 2014) in recent years. A ratio of less than 1.0 indicates that the subgroup is less prevalent in the outcome than the cohort, and is considered to be underperforming.

Metric Description: Using the cohorts used for calculating the Scorecard completion rate, the equity index, or the percentage in the outcome subgroup divided by the percentage in the original cohort (outcome percentage/cohort percentage), is calculated. An example of calculating the equity index for African American looks like this:

\[
\text{Equity Index} = \frac{\% \text{ of African American students represented in the outcome}}{\% \text{ of African American students represented in the cohort}}
\]

Target: The goal is to increase underperforming subgroups’ indices each year until all are above a set level (i.e. target value).

STUDENT SERVICES

4. Percent of Students with an Education Plan

SB 1456 mandates that first-time students develop an education plan to receive priority in registration, beginning in fall 2014.

Metric Description: Percentage of credit and noncredit students who have an education plan, excluding those who are exempt from having one.

Target: The target will be set on the percentage of students who have an education plan in each fall term. This metric will not be used for the system goals until the new data elements have become available.
EFFICIENCY

5. FTES Generated Per Scorecard Completion Outcome

This efficiency measure uses the Scorecard completion rate and indicates how much student time (measured by Full Time Equivalent Students, or FTES) was generated to produce one outcome in each cohort.

**Metric Description:** The six-year total FTES generated by the Scorecard completion cohort divided by total number of high order outcomes, including earning a degree, certificate, transfer to a four-year institution, or becoming “transfer-prepared” (earning 60 CSU/UC transferrable units) generated by the same cohort. A student getting multiple outcomes is counted each time an outcome is attained, except that ‘transfer-prepared’ is counted only if no other outcomes are achieved. This metric is also separated out for the ‘prepared’ and ‘unprepared’ students.

**Target:** The target will be set on the FTES per outcome in each new cohort

ACCESS

6. Participation Rate for the System

This metric is published annually in the State of the System Scorecard report and previously in the Accountability Reporting for the Community Colleges (ARCC). It measures the rate at which California residents enroll in community colleges in a given academic year.

**Metric Description:** Number of students ages 18-24 attending a community college per 1,000 California residents in the same age group.

The data source for enrollment is COMIS, and the resident count comes from ‘Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060’ published in January 2013, by California Department of Finance.

**Target:** The target will be set on the participation rate each year

7. Participation Rate for Subgroups

The equity index is used with the participation rate to measure equity in access. The metric gauges the degree of equity in participation by comparing the representation of each subgroup enrolled in the community college system with its representation in the state population.
Metric Description: The equity index, as calculated by the proportion of each subgroup enrolled in community colleges divided by its proportion in the population, among ages 18-24.

An example of calculating the equity index for African American looks like this:

\[
\text{Equity Index} = \frac{\% \text{ of African American students enrolled in CC, ages 18 to 24}}{\% \text{ of African American living in California, ages 18 to 24}}
\]

The subgroups to be evaluated are limited to Hispanic and African American due primarily to small and seemingly unstable population counts projected for ‘American Indian’ and ‘Native Hawaiian and other Pacific Islander’ categories.

The data source for enrollment is COMIS, and the population count comes from ‘Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060’ published in January 2013, by California Department of Finance.

Target: The goal is to maintain the equity index above a set level (i.e. target value) for all subgroups
Appendix A

Organizations represented in the Scorecard Advisory Committee are as follows.

Academic Senate

Association of Community and Continuing Education

California Community Colleges Chief Instructional Officers

California Department of Finance

Chief Information Systems Officers

Chief Student Services Officers

Community College League of California

Community College Public Relations Organization

Foundation for California Community Colleges

The Legislative Analyst’s Office

The RP Group

The Statewide Vocational Research and Accountability Committee

The Student Senate for California Community Colleges
References


