### **The Online Education Initiative:**

Access and Quality of Online Education in California's Community Colleges 2015-2016

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#### Introduction

The Online Education Initiative (OEI) is a multi-year program funded by the California Community Colleges Chancellor's Office and managed by the Academic Affairs and Technology, Research, and Information Systems Divisions. The goal of the initiative is to significantly increase the number of CCC students who obtain associate's degrees and/or transfer to four-year colleges through access to high-quality online instruction and student support services. Leadership of the OEI was awarded to the Foothill-De Anza and Butte-Glenn Community College Districts in 2013-14, and the Research and Planning Group for California Community Colleges (RP Group) was contracted as the independent third-party evaluator.

To meet the goal described above, the Online Education Initiative is pursuing the following objectives:

- **Support the development of a seamless student experience** by ensuring that the CCMS and other system-wide online technologies, such as the student services portal and education planning system currently under development by the California Community Colleges Chancellor's Office (CCCCO) Education Planning Initiative, are integrated with one another in order to assist students with navigating processes such as admissions, student success services and programs, financial aid, and credit transfer across community colleges.
- Increase the number of high-quality online courses that adhere to the highest standards in online education in order to increase student success.
- Offer support to faculty teaching online courses in the areas of course design and development as well as by providing professional development opportunities.
- Develop and offer online student support services to increase retention and success rates in online courses, including, but not limited to, tutoring, course readiness resources, and targeted resources for academically underprepared students in need of basic skills support.
- Support the local deployment of a common course management system (CCMS) to effectively deliver and manage both online courses and resources for students as well as establish a comprehensive online community for the CCC system.

Implement an Online Course Exchange in which participating CCCs can collaboratively develop and share online, credit-bearing courses and programs that provide increased access for students seeking to complete their educational goals.

# Measuring the Effect of the Online Education Initiative

This report is the second in a series of annual reports produced by the RP Group throughout the implementation of the OEI. The dual purpose of this report is to (1) describe the measures that will be used to document and report on the initiative's progress towards its long-term goal over the next few years, and (2) provide an update on progress towards the OEI objectives mentioned earlier. An initial collaborative process between the RP Group and key representatives from the initiative resulted in the development of measurable outcomes, grouped into three areas of impact: (1) online education delivery, (2) student success, and (3) institutional efficiencies.

Below is a description of the three areas of impact, including related outcomes and metrics. Baseline data are provided where available; where baseline data are not yet available, this report presents the expected timeline and assessment method to evaluate these goals.

To collect data on these three sets of impact areas, a combination of quantitative and qualitative research methodologies were used. Quantitative data come from the CCCCO Management Information System (COMIS), the colleges' institutional research offices and/or data collection systems, and the tutoring vendor contracted by OEI, Link-Systems International. Qualitative data were collected via focus groups, interviews, and surveys conducted with and/or administered to community college students, faculty, administrators, and staff.

## **Area of Impact 1: Online Education Delivery**

Data suggest that student retention, persistence, and success rates are all factors associated with the quality of online courses and the faculty who teach them. To evaluate the impact of OEI, the metrics presented below will be used to measure OEI's impact over time.

# Metric 1.1: The number of online courses that meet rigorous standards of quality will increase.

Currently, there is no systematic process used throughout the CCC system for assessing the quality of online courses. During 2013-2014, the OEI developed rigorous course review standards, informed by national standards for online courses established by the International Association for K-12 Online Learning (iNACOL)<sup>2</sup> as well as a review of the literature on existing rubrics, such as the Blackboard Exemplary Course Rubric. These standards were

<sup>&</sup>lt;sup>1</sup> Hart, C. (2012). Factors Associated With Student Persistence in an Online Program of Study: A Review of the Literature, *Journal of Interactive Online Learning, 1:1*, 19-42.

<sup>&</sup>lt;sup>2</sup> National Standards for Quality Online Courses, iNACOL, October 2011

developed in collaboration with faculty appointed by the statewide Academic Senate and other experts in the area of instructional design. Before being offered through the OEI's Online Course Exchange, an online course must undergo a peer course review process by faculty trained in the use the OEI's Course Design Rubric to ensure the course meets established standards related to course design, instruction, and accessibility.

Since 2014-15, there has been a 28.4% increase in the number of courses in the CCC course identification numbering system (C-ID)<sup>3</sup> that have entered the review process as part of the OEI pilot evaluation (see Table 1). In 2015-16, 104 total courses underwent the review process, with 25 courses identified as meeting all the requirements to be offered in the Exchange.

Table 1. Number of OEI C-ID Courses in Review

Metric	2014-15	2015-16	1415 to 1516 % Change
Number of OEI C-ID courses in	review <sup>4</sup> 81	104	+28.4%

# Metric 1.2: The number of community college faculty prepared to teach in an online environment will increase.

To increase faculty preparedness to teach in an online environment, two key professional development activities focused on online teaching pedagogy were offered through a partnership between OEI and @ONE, a CCCCO funded professional development project that provides CCC faculty and staff with access to resources and services to learn about technologies that enhances student learning and success<sup>5</sup>. The Applying the Course Design Rubric (ACDR) workshop prepares participants to utilize the OEI Course Design Rubric for their own teaching or as part of a larger local online quality program. The Peer Online Course Review (POCR) training equips faculty to assess the effectiveness of an online course as measured by its alignment with the design elements of the OEI Course Design Rubric. During 2014-15, over 300 faculty members participated in these professional development activities.

The number of participants for OEI hosted professional development activities has increased since 2014-15. During 2015-16, a facilitated Intro to Teaching in Canvas<sup>6</sup> training was offered, and a total of 423 attendees participated in this activity, representing faculty from 76 CCCs in the system.<sup>7</sup> To scale up the training and make it more sustainable, a self-paced version of this training was developed during fall 2015 and made available to all colleges implementing Canvas at their local institutions. To date, there have been 423 registrations from 90 CCCs for the self-paced course.

<sup>&</sup>lt;sup>3</sup> C-ID numbers identify lower-division transferable courses commonly articulated between the California Community Colleges (CCC) and universities (including University of California, California State University, as well as many of California's independent colleges and universities). https://c-id.net/

<sup>&</sup>lt;sup>4</sup> Source of information from OEI and @ONE

<sup>&</sup>lt;sup>5</sup> http://www.onefortraining.org/about

<sup>&</sup>lt;sup>6</sup>Canvas is the course management system used by OEI courses.

<sup>&</sup>lt;sup>7</sup> OEI's 2016-2017 Mid-Year Report

## Metric 1.3: The number of online degree-applicable and/or transfer courses and sections offered statewide will increase.

Since 2013-14, the number of transfer and/or degree-applicable online courses has been steadily increasing each year (see Table 2). During 2015-16 year, 12,894 transfer- and/or degree-applicable online courses with 45,004 sections were offered across the state, representing a respective 6.4% and 9.7% increase from the previous year in the total number of online courses and online sections offered statewide. System-wide, colleges are trying to meet their minimum college enrollment totals, and the increase of online courses and sections over time may be a reflection of one of the strategies colleges are employing to do so.

Table 2. Number of Online Courses and Sections Statewide

Metric	2013-14	2014-15	2015-16	1415 to 1516 % Change
Number of online courses statewide	11,564	12,115	12,894	+ 6.4%
Number of online sections statewide	37,497	41,009	45,004	+ 9.7%

### **Area of Impact 2: Student Success**

The following metrics will be used to assess if and how the online courses and student supports offered through the Online Course Exchange impact student success. It should be noted however that given that the Online Course Exchange just launched its first pilot in the spring of 2017, all metrics displayed in this area reflects general statewide trends over the past three years.

# Metric 2.1: The time to degree completion and/or transfer to four-year institutions among online students will be shorter.<sup>8</sup>

Tables 3a and 3b provide a glimpse at what the statewide completion counts and rates for all students in all modalities. Over the past years, the average time CCC students take to complete a degree for the first time or transfer to a four-institution is approximately seven years. However, the volume of students earning a degree for the first time has been steadily increasing; there is an 8.6% increase in the number of students earning a degree for the first time between 2014-15 and 2015-16. Also included is the proportion of degree earner students who completed at least one online course that was degree-applicable and the proportion of transfer students who completed at least one online course that was transferrable. Over the past three years the proportion of first-time degree earners and transfer students who completed at least one degree-applicable or transferrable online course has increased from 67.2% in 2013-2014 to 72.1% in 2015-2016. A comparison of the time to completion reveals that students who complete at least one online course take the same amount of time to complete a degree but for students who transferred, the time to transfer is two years shorter for students who completed at least

<sup>&</sup>lt;sup>8</sup> Data Source: California Community Colleges of Chancellor's Office ERDB01 Database. Time to completion based on students' initial enrollment in CCC system and anchored to when students initially completed a degree. The Online Education Initiative: Access and Quality of Online Education in California Community Colleges 2015-16

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transferrable online course than it was for students who did not complete any transferrable online course.

Table 3a. Total Number of Students – First Time Completing an Outcome - Statewide Trends

First time:	2013-14	2014-15	2015-16	14-15 to 15-16 % Change
Degree Earner				
Total Number of Students	77,045	81,426	88,393	+8.6%
Percentage Who Completed At Least One Online Course**	67.2%	69.7%	72.1%	+3.4%
Transfer to Four-Year Institution <sup>9</sup>				
Total Number of Students	172,441	168,897	*	N/A
Percentage Who Completed At Least One Online Course***	30.1%	34.3%		N/A

*Notes.* \*Transfer information not complete for 2015-16 year. \*\* Online course that is degree-applicable, \*\*\*Online course that is transferrable. Time to completion based on initial credit course enrolled and initial degree/transfer completion.

Table 3b. Average Number of Years – First Time Completing an Outcome - Statewide Trends

First time:	2013-14	2014-15	2015-16	14-15 to 15-16 % Change
Degree Earner Overall	4.8	4.7	4.7	0.0%
Completed at least one online course**	4.8	4.8	4.8	0.0%
Did not complete any online course	4.7	4.7	4.7	0.0%
Transfer to Four-Year Institution	6.8	6.6	*	N/A
Completed at least one online course***	5.1	5.2	*	N/A
Did not complete any online course	7.5	7.4	*	N/A

*Notes.* \*Transfer information not complete for 2015-16 year. \*\* Online course that is degree-applicable, \*\*\*Online course that is transferrable. Time to completion based on initial credit course enrolled and initial degree/transfer completion.

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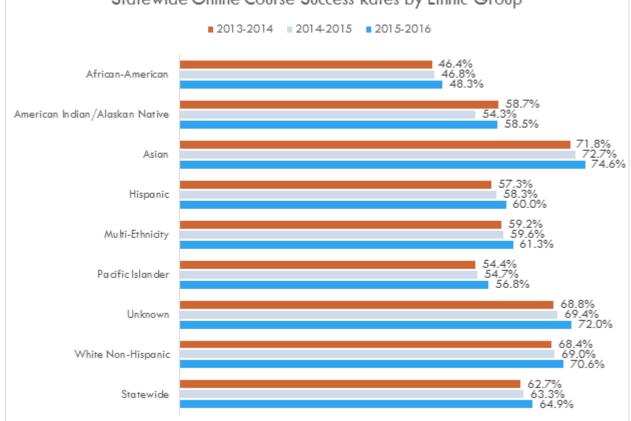
<sup>&</sup>lt;sup>9</sup> Students who were first enrolled in CCC with a date greater than or equal to transfer to four-year date are excluded from these figures.

#### Metric 2.2: The success rate gap in online courses among students of differing ethnicities will decrease.

Figure 1 on the following page compares student success rates by ethnic group. <sup>10</sup> The gap in success rates found among ethnic groups in the baseline year are present again in 2015-16— African-American, American Indian/Native Alaskan, Hispanic, and Pacific Islander students have lower success rates in online credit courses than their peers in other ethnic groups. However, the statewide success rate for all online credit courses is 1.6% higher than it was in 2014-15 and this upward trend in success rate is also evident across the ethnic groups.

Statewide Online Course Success Rates by Ethnic Group 2013-2014 2014-2015 2015-2016 African-American

Figure 1. Statewide Online Course Success Rates by Ethnic Group



Data Source: CCCCO's Data Mart for all credit, Internet-based courses

 $<sup>^{10}</sup>$  Data Source: California Community Colleges of Chancellor's Office Data Mart  $\,$ 

#### Metric 2.3: The success rate gap in online courses among students from special population groups will decrease.

Figure 2 on the next page compares online credit course success rate among special population groups. Similar to the ethnic group comparisons above, online credit course success rates across all special population groups increased across the board. Of all special population groups, online course success rates improved the most between 2014-15 and 2015-16 for students participating in Puente and Umoja—two programs geared toward Hispanic and African-American/Black student populations, respectively.

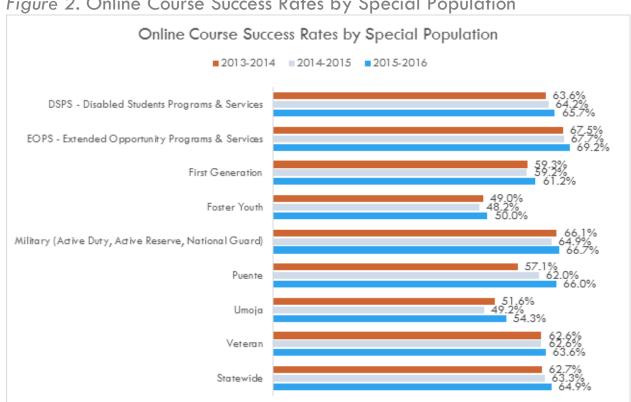


Figure 2. Online Course Success Rates by Special Population

Data Source: CCCCO's Data Mart for all credit, Internet-based courses

#### Metric 2.4: The number of colleges that offer online tutoring and online learner readiness orientations as well as other student supports geared towards the online student population will increase.

As of 2015-16, all 24 OEI pilot colleges have access to the Quest for Online Success readiness modules and NetTutor online tutoring services. In partnership with the CCCCO, the RP Group developed questions that were embedded in the 2016-17 statewide CCCCO Survey of Colleges' Distance Education Programs and Services. This survey was designed to collect information about how many CCCs are currently aware of and/or using OEI-supported services and tools.

The survey was administered in early spring 2017, but will not be reported on until the end of the 2016-17 academic year. However, based on OEI's 2017 mid-year report, students from 51 colleges have used NetTutor online tutoring services and all 113 CCCs now have access to the Quest for Online Success modules.

# Metric 2.5: The number of students enrolled in an online course who access online support services will increase.

OEI's online course preparation and online tutoring services were first piloted in spring 2015 and so baseline data for this metric is for the 2015-16 year. Based on data submitted by the pilot colleges, there were 6,860 enrollments across 205 sections that piloted at least one OEI resource.

# Metric 2.6: Successful course completion rates (earning a grade of C or higher) for students in online courses who use online support tools will be higher than the rates of students who do not use these tools.

As noted above, the online course preparation and online tutoring services were first piloted in spring 2015, and therefore, data from the 2015-16 academic year will serve as the baseline for this metric. In general, online credit course success rates have increased steadily since 2013-14 statewide and among the 24 OEI pilot colleges. In online course sections that piloted OEI support services during 2015-16, the average student success rate was 68.8%—2.9 percentage points higher than the overall online course success rate at the pilot colleges, and 3.9 percentage points higher than the average online course success rate statewide.

Compared to face-to-face sections, online credit course success rates statewide and in OEI pilot colleges are both 7.5 percentage points lower.<sup>11</sup>

Table 4. Comparison of Online Course Success Rates

Online Credit Course Success Rates	2013-14	2014-15	2015-16	% Change
Statewide	62.7%	63.3%	64.9%	+2.5%
OEI Pilot Colleges – All online courses (includes both OEI pilot and non-pilot courses)	63.5%	64.4%	65.9%	+2.3%
OEI Pilot Colleges – Only OEI pilot sections*	N/A	N/A	68.8%	N/A

\*Note: Data are based on student-level records voluntarily submitted by participating pilot colleges; therefore, they may not represent all of the students in all of the sections that were in the OEI pilot since there were a few colleges that did not submit records.

<sup>&</sup>lt;sup>11</sup> Data source: California Community Colleges Chancellor's Office Data Mart

### **Area of Impact 3: Institutional Efficiencies**

Institutional efficiencies resulting from the implementation of the Online Course Exchange will be measured by looking at simplifications of administrative processes and potential economic benefits. In particular, the OEI will examine two metrics in order to assess progress in this area.

Metric 3.1: The Course Exchange will help facilitate streamlined data transfer and resource deployment between colleges, enabling students from one college to take a course online and get credit at another college, as well as improve communication and collaboration among faculty.

The implementation of the Exchange was delayed to 2017-18. As a result, satisfaction surveys will not be administered to community college students, faculty, administrators, and staff until fall 2017. The focus of the surveys will be on gathering information regarding increased efficiencies and improvements in effectiveness that directly result from the use of the CCMS through the Exchange.

Metric 3.2: Leveraging the collective purchasing power for different technologies, including the CCMS, common user licenses, and vendor services such as a shared tutoring platform, will result in cost savings for both individual colleges and the CCC system.

A full cost-effectiveness study will be explored in the future; however, the exact timing of this study is yet to be determined and will be gathered after the Exchange is fully implemented by the participating pilot colleges at the end of 2016-17. OEI is projected to save the CCC system at least \$8 million annually through its procurement of the CCMS and other resources. To date, 103 CCCs (91% of all CCCs) have chosen to adopt Canvas. Moreover, OEI reports that 112 out of the 113 CCCs have utilized at least one of OEI's resources (e.g., Canvas, online tutoring, online readiness programs). At the time of this report, it was reported in OEI's mid-year report that 64 colleges have purchased licenses for NetTutor and 48 non-pilot colleges offering Quest locally.

<sup>&</sup>lt;sup>12</sup> OEI's 2016-2017 Mid-Year Report

#### **Conclusion**

Based on the data from 2015-16, there are upward trends across all three areas of impact: (1) online education delivery, (2) student success, and (3) institutional efficiencies. As OEI continues to scale up its services and resources, more and more online courses will have access to support services and tools that can improve the online teaching and learning experience. Additionally, online credit course success rate comparisons reveal that the system may already be benefitting from the OEI, based on the increases in student success observed both statewide and at the pilot colleges, with an even higher success rate in specific OEI-piloted course sections.

The RP Group's evaluation of OEI represents a unique opportunity for policymakers as well as community college faculty, administrators, and staff to provide more detailed information about the potential impact on student completion when adequate resources are provided for faculty and students in an online environment. In addition, the evaluation findings will highlight the resulting efficiencies and cost savings to the CCC system, individual colleges, and students that can be created by leveraging technology and best practices through collaboration.