2017 REPORT

Telecommunications and Technology Infrastructure Program Report

CALIFORNIA COMMUNITY COLLEGES
CHANCELLOR'S OFFICE

State of California

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March 10, 2017

The Honorable Edmund G. Brown Jr.
Governor of California
State Capitol
Sacramento, California 95814

RE: Telecommunications and Technology Infrastructure Program

Dear Governor Brown:

Please find enclosed the California Community Colleges Chancellor's Office report on the Telecommunications and Technology Infrastructure Program, managed by the Technology and Telecommunication Unit. This report meets 2014-15 and 2015-16 Budget Act requirements.

Included in this report are program highlights, financial charts and future program direction. This report also summarizes how the program furthers the mission of the California Community Colleges and specifically its commitment to the effective use of technology in education.

Should you or your staff have any questions, please feel free to contact Vice Chancellor Debra Connick of the Technology, Research and Information Systems Division at (916) 445-6299 or **dconnick@cccco.edu**.

Sincerely,

Eloy Ortiz Oakley, Chancellor

Cc: Legislative Analyst Office
    Department of Finance

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Telecommunications and Technology Infrastructure Program Report

EXECUTIVE SUMMARY

The California Community Colleges serves more than 2.1 million students and is the largest system of higher education in the nation. The state's 113 colleges provide workforce training, teach basic math and English, and prepare students for transfer to four-year universities and colleges.

The Chancellor's Office Telecommunications and Technology Infrastructure Program was created by Budget Act language in fiscal year 1996-97 to provide systemwide technical innovations and support, and to coordinate activities that maximize the system's investment in technology.

 In the late 90s, a system called 4CNET was implemented connecting educational institutions to the emerging internet community. Connectivity expanded to include video conferencing and satellite networks, enabling colleges to share both data and video communications. In addition, the Telecommunications and Technology Infrastructure Program has long supported library automation, local telecommunications planning, technology training and e-conferencing.

In 2001, due to the need for increased bandwidth, charter partners (University of California, California State University, Stanford University, California Institute of Technology and University of Southern

California) formed CENIC, a new optical network, to provide high speed / high capacity networking and represent the common interests of California's higher education academic and research communities.

In 2008, Telecommunications and Technology Infrastructure Program allocations for colleges to maintain local technology and infrastructure were eliminated. The program budget was reduced from approximately $44 million to $15.3 million. This 65 percent reduction required colleges to finance the technology expenditures that the Telecommunications and Technology Infrastructure Program once supported.

During fiscal year 2013-14, the Telecommunications and Technology Infrastructure Program continued to make program and budgetary adjustments to address the rising costs of providing internet connectivity to the California Community Colleges, including circuit and equipment replacement costs. Although colleges continued to partially fund backup connections to the internet, video conferencing services agreements were cancelled and existing program project budgets were further reduced. The Telecommunications and Technology Infrastructure Program provided technology application innovations, technical leadership and coordinated activities that maximized the system's investment in technology with the expressed goal of improving learning outcomes.

In fiscal year 2014-15, with a budget of $21,790,000, the program was provided additional one-time funding for technology infrastructure. The budget was reduced in fiscal year 2015-16 to $19,890,000, to reflect the removal of the previous years' one-time funding. In fiscal year 2016-17, the budget increased to $25,890,000 to reflect an increase of $8,000,000, including $5,000,000 for CENIC infrastructure and $3,000,000 for data security. There is also an additional one-time $7, 700,000 allocation for enhanced CENIC infrastructure.

TELECOMMUNICATIONS AND TECHNOLOGY INFRASTRUCTURE PROGRAM 2014-15 AND 2015-16

This report provides up-to-date information on the programs supported through the Telecommunications and Technology Infrastructure Program and includes:

- Information regarding the systemwide budget cuts of the past few years.

- Details regarding impacted classes and staff reductions.

- The development of the Student Success Program and Gov. Brown's Online Education Initiative.

In addition to the delivery of existing technology services, Telecommunications and Technology Infrastructure Program leadership was instrumental in the launch of the initiatives for Online Education, Common Assessment and Education Planning. The primary goal of the first several months of the three initiatives was to develop charters of each project, establish the governance structure and recruit representatives from constituency groups across the California Community College. This report includes updates on the three technology initiatives managed by the technology division of the Chancellor's Office.

The grant's Technology Center provides technical assistance and planning, cooperative purchase agreements and supports new statewide technology pilots and ongoing technology programs, such as CCCApply, a uniform application to be used by all of the 113 community colleges.

The electronic transcript project, eTranscriptCA, expanded and as of June 30, 2016, there were 93 colleges participating. As of November 2016, it was still at 93.

The partnership with CENIC provides high-bandwidth connectivity and enables the system to negotiate a flat rate for service, which is now saving the system as much as $4.1 million annually through the California Teleconnect Fund Program.

The Telecommunications and Technology Infrastructure Program strives to improve education and educational services and is committed to innovation and student success. Technology continues to change the way educational institutions run their business and educate their students. The Telecommunications, Technology and Infrastructure Program brought high-speed broadband to the California Community Colleges and the program continues to challenge the status quo through innovative solutions.

The Telecommunications and Technology Infrastructure Program worked with CENIC, the California Public Utilities Commission and the California Teleconnect Fund to reduce internet costs for all colleges in the system and worked diligently to continue to seek out technology-related grants.

Through technology, the Telecommunications and Technology Infrastructure Program strives to improve education and educational services and is committed to innovation and student success.

METHODOLOGY

The Chancellor's Office Telecommunications and Technology Unit is continuously engaged with grant project teams throughout the state. In addition to reviewing biannual updates, the technology unit staff attends regular project meetings and participates in impromptu discussions and face-to-face events with the teams. The staff also collaborates on current technology issues with advisory committees from the system's colleges.

The directors of each grant project submitted the data used in this report. Additional project details can be found on the California Community Colleges Chancellor's Office Grant Details page (**http://extranet.cccco.edu/Divisions/TechResearchInfoSys/Telecom/GrantInformation.aspx**) and then by selecting the individual grant.

TELECOMMUNICATIONS AND TECHNOLOGY INFRASTRUCTURE PROGRAM BACKGROUND

The Chancellor's Office Technology, Research and Information Systems division governs the Telecommunications and Technology Infrastructure Program (TTIP), which is guided by provisions of the Strategic Technology Plans developed by the Telecommunications and Technology Advisory Committee.

The latest technology plan has the following objectives:

- Protect the state's prior technology investment.

- Expand and improve student services.

- Utilize current technology to leverage the existing infrastructure.

The Chancellor's Office is currently funding six systemwide technology projects, all of which were awarded through a competitive grant process. These projects include:

1. Online Education Initiative

2. Common Assessment Initiative

3. Education Planning Initiative

4. Telecommunications and Technology Infrastructure Program — TTIP North

5. Telecommunications and Technology Infrastructure Program South – 3C Media Solutions

6. Cal-PASS Plus — California Partnership for the Achievement of Student Success

FINANCIAL CHART

Funding for technology infrastructure and training at the college level was eliminated in 2007-08 and library funding was eliminated in 2009-10.

The table below shows Telecommunications and Technology Infrastructure Program funding from fiscal year 2010-11 through fiscal year 2016-17.

Year	Funded Amount	Comments
2010-11	$15,290,000	Reduction of 9.45 percent from prior year due to the lack of additional stimulus funding.
2011-12	$15,290,000	
2012-13	$15,290,000	
2013-14	$15,790,000	
2014-15	$21,790,000	Included special one-time funding for Technical Infrastructure.
2015-16	$19,890,000	Reflects removal of one-time funding for Technical Infrastructure funding
2016-17	$25,890,000 $7,000,000	Includes ongoing $5 million for CENIC infrastructure, and $3 million for data security. There is also a one-time allocation for enhanced CENIC infrastructure.

ONLINE EDUCATION INITIATIVE

INTRODUCTION

The California Legislature funds the Online Education Initiative of the California Community Colleges Chancellor's Office (Chancellor's Office) to increase student completion through expanded student access to high quality online courses across the state.

This will be achieved by implementing a robust online learning and support ecosystem with comprehensive resources and expanding access for California community college students to high-quality online course offerings that are coordinated across participating colleges, with focused effort toward ensuring high levels of retention and success. Key areas for enhanced student access and completion include Associate Degree for Transfer pathways, coordinated access to high-demand and specialized courses across colleges, increased opportunities to earn credit for prior learning and just-in-time online resources that address the needs of underperforming students.

ONLINE EDUCATION INITIATIVE AT A GLANCE

All 113 colleges now have access to a suite of resources to enhance our students' online learning experience. The Online Education Initiative has formed a robust ecosystem (see chart below), with full participation by selected pilot colleges and emerging use by California community college throughout the state. This ecosystem is composed of:

1. **Success resources** (platforms and services) at low or no cost to the college.

2. Courses within a **common learning environment** (Common Course Management System and optional integrated student success resources).

3. An **exchange** of course sections shared across colleges that participate in the Online Education Initiative Consortium (Currently in preparation; the eight full launch pilot colleges will offer the first courses in spring 2017).

Current Online Education Initiative Ecosystem
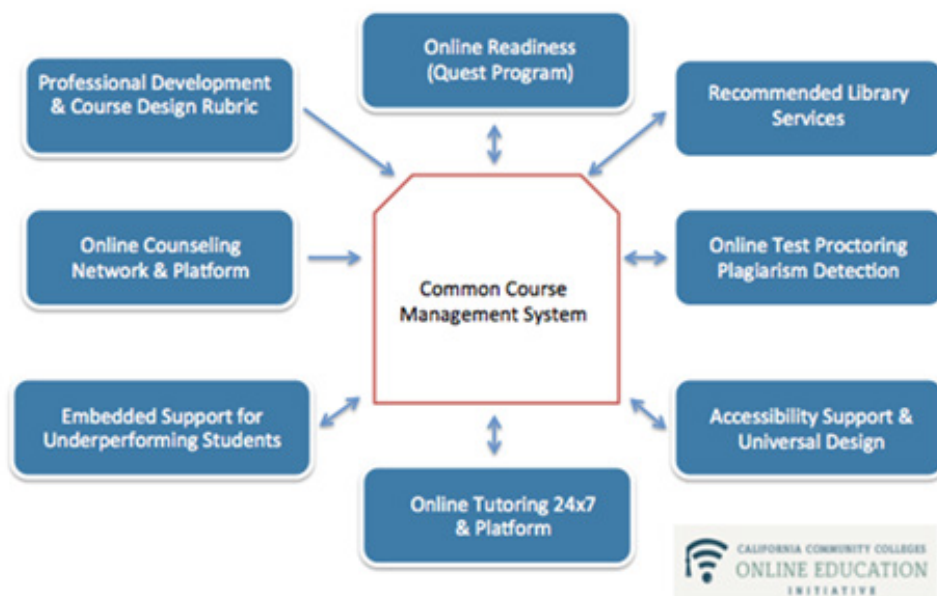
The numerous project milestones that have been achieved are listed below, and many are detailed in the following sections.

ORGANIZATIONAL

- Online Education Initiative launch team begins the planning process (December 2013).

- Online Education Initiative executive staff hired (September 2014).

- Launch Online Education Initiative Steering Committee (April 2014).

- Launch Online Education Initiative Consortium (October 2015).

- Ratify Online Education Initiative Consortium Charter (December 2015).

- Select and license new Online Education Initiative resources (September 2015).

- Accelerated hiring to meet increased demand for training (Began November 2015).

- Interim student equity officer on board (March 2016).

STUDENT SUCCESS RESOURCES

- Launch online learner readiness tutorials with Creative Commons licensing (fall 2014).

- Launch online tutoring platform and services (fall 2014).

- First student success resource pilots: readiness resources and online tutoring (spring 2015).

- Public version of online tutoring and embedded basic skills handbooks for faculty released (December 2015).

- Online proctoring technology vendor procured (December 2015).

- Online counseling platform vendor chosen through RFP process (December 2015).

- Online proctoring vendor chosen through RFP process (June 2016).

- Students who have never used tutoring are taking advantage of online tutoring and students found the resource easy to use.

- In spring 2016, 2348 students from 50 colleges used online tutoring services, a 500 percent increase from spring 2015.

- 65 California community colleges now have some version of online tutoring.

- More than 49,000 visitors accessed the Online Readiness multimedia tutorials web pages. By the fall 2015 term, an estimated 5,900 students in pilot online courses have had access to Online Education Initiative student success resources (Online Learner Readiness, Online Tutoring, embedded basic skills and/or course design standards).

COMMON COURSE MANAGEMENT SYSTEM TECHNOLOGY RESOURCES

- Selected a vendor for the statewide common course management system (June 2015).

- OEI announces that it will cover the cost of common course management system licenses for

California community colleges that adopt the platform campus-wide through fiscal year 2018-19 (July 2015).

- Began common course management system deployment for non-pilot colleges in phases (July 2015).

- Common course management system support website released with CMS selection, adoption, and migration resources (Aug 2015).

- Readiness and online tutoring integrated in common course management system (July 2015).

- First pilot colleges offered Online Education Initiative courses within common course management system (eight full launch colleges) to local students (Fall 2015).

- Migration tool released (Nov 2015).

- 88 California community colleges (77 percent) have adopted the common course management system, 77 community colleges (66 percent) are in the process of implementation; and 55 community colleges (48 percent) now offer students courses in the platform.

CALIFORNIA VIRTUAL CAMPUS CATALOG

- Development of California Virtual Campus Catalog updates for accessibility compliance and Associate Degree for Transfer course clarifications (Year 3).

ONLINE EDUCATION INITIATIVE EXCHANGE

- Began Exchange planning and design (April 2015).

- Began Exchange technology development (May 2015).

- Launched Online Exchange Initiative Consortium (October 2015).

- Online Exchange Initiative Steering Committee and Consortium began review of the memorandum of understand (October/November 2015).

- Initial reciprocity agreement accepted by the eight full-launch pilot colleges (January 2016).

- Initial Exchange pilot local implementation teams formed at the eight full-launch colleges and face-to-face kickoff meetings took place at 11 colleges (May 2016).

COMMUNICATIONS

- Began bi-monthly Online Exchange Initiative blogs and TechEDge e-newsletters (April 2014).

- Launched weekly Pilot College e-newsletter (October 2015).

- Launched re-designed Online Exchange Initiative website (December 2015).

- Common Course Management Systems community for faculty launched (February 2016).

- At least 50 Online Education Initiative presentations and/or trainings at colleges across the system (fiscal year 2015-16).

- 112 California community colleges (99 percent) are participating in OEI-related endeavors (resources, events, training, etc.)

- 104 California community colleges (92 percent) use Online Education Initiative resources

TIMELINE

The project began in December 2013 and the grant will be complete in 2018. The timelines for various aspects of the project are illustrated below for reference and are discussed throughout this review.
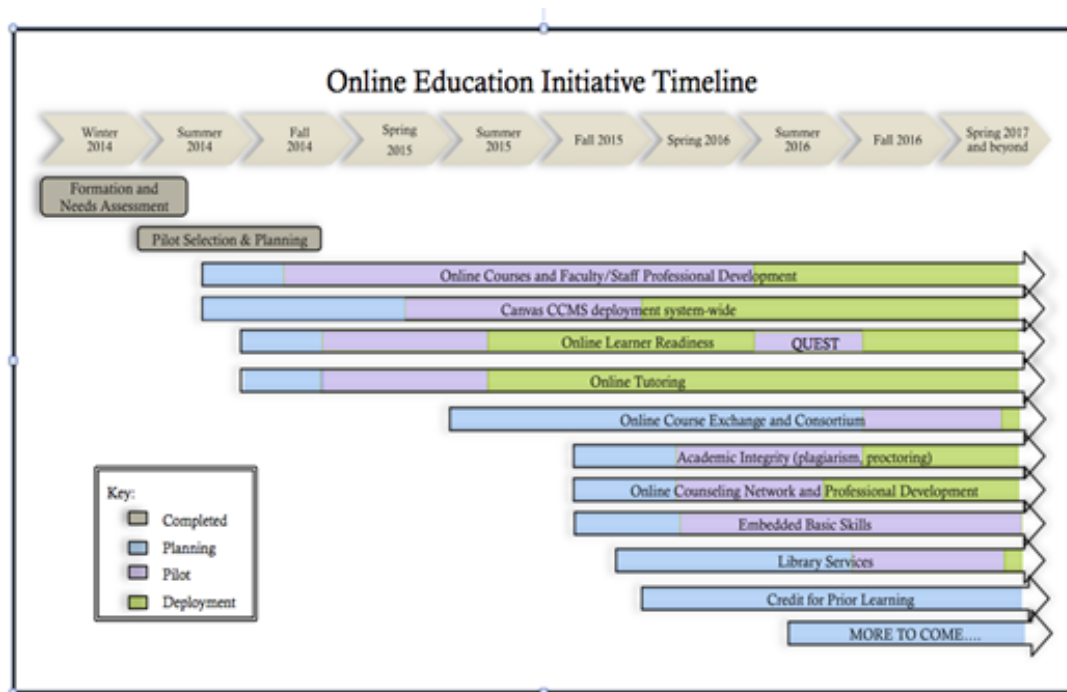

THE ECOSYSTEM: COMMON COURSE MANAGEMENT SYSTEM

Colleges are exhibiting interest in campus-wide adoption of the Common Course Management System, offered at no cost to colleges through the 2018-19 fiscal year. In partnership with our vendor, we are providing extensive training and support to colleges. Colleges using the management system are required to sunset their legacy learning management system within a defined period. Only a year after the selection of a vendor by the Common Course Management System Committee, 77 percent of California community colleges (88) are in various stages of adoption and migration; adoptions are now more than one and a half years ahead of projections.

- In summer 2015, the initial eight full-launch colleges implemented the Common Course Management System and migrated the Online Education Initiative-selected courses to that platform. By the fall 2015 term, students at these eight colleges were the first to enroll in online courses that had undergone a peer review against the rubric, and were presented in the Common Course Management System. By the spring 2016 term, students at all 24 pilot colleges were able to enroll in online courses meeting the same requirements.

- The migration toward the Common Course Management System is producing institutional and systemwide efficiencies, with an estimated cost savings annually of at least $8 million.

With 55 California community colleges (48 percent) now offering students courses in the Common Course Management System, the platform acceptance rate among California community colleges has far exceeded initial estimates. As the following graph illustrates, the number of students using the management system by June 2016 already exceeds the goal for December 2017.

CCCs with Students Live in the CCMS
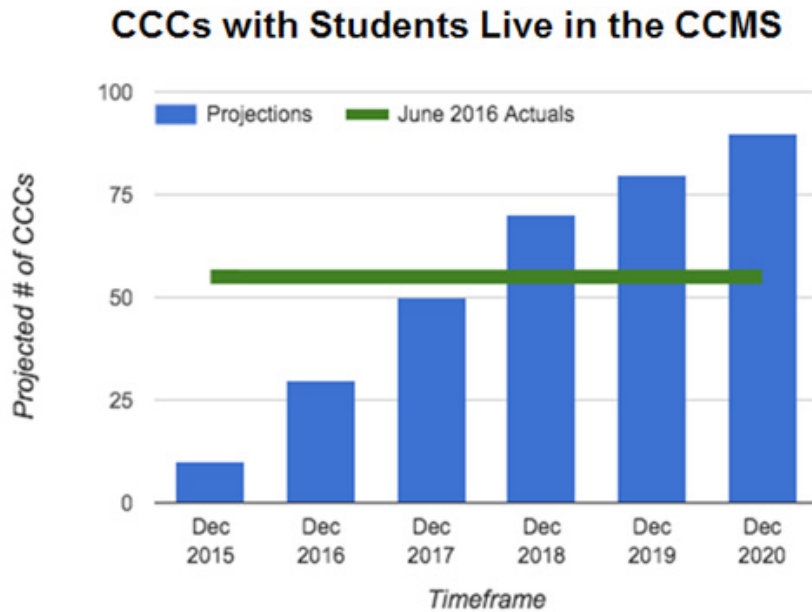
THE ECOSYSTEM: STUDENT SUCCESS RESOURCES

To ensure that students have the support needed to be successful online learners, an array of online services are now part of the Online Education Initiative Ecosystem and many are already available to all California community colleges, often at no or low cost. These resources are the foundation for the first-ever California Community Colleges course exchange ("Exchange").

Systemwide Resources for All California Community Colleges

Available at No Cost	Available at Reduced Cost
Common Course Management System infrastructure and 24/7 help desk support for students and faculty through 2018	Online Tutoring Services
Online Tutoring Platform	Online Proctoring Technology Solution
Online Learner Readiness Multimedia Tutorials	Online Plagiarism Detection Technology
Online Education Initiative Course Design Rubric	Online Counseling Platform
Professional Development Resources	
Embedded Basic Skills Resources	
Common Course Management System 4-week course for colleges adopting the common platform	
Research and support strategies for serving underperforming, non-traditional and socioeconomically disadvantaged students online	

Online Learner Readiness

An online learner readiness resource was designed to prepare students for success in online courses. While online learner readiness checklists have been available for some time, this tool is an online workshop that combines a diagnostic assessment, multimedia learning tutorials, check on learning quizzes, feedback surveys and supplemental learning materials. The multimedia learning tutorials are available to the public under Creative Commons licensing and the entire workshop, currently used by the 24 pilot colleges, were available to all California community colleges beginning in fall 2016.

Online Tutoring

All California community colleges can now take advantage of two online tutoring platforms, one at no cost and another at reduced cost via the Foundation's CollegeBuys program. Analysis suggests that these tutoring services have increased student use of online tutoring, and attracted students who have never requested tutoring services before.

Basic Skills Support

Working with California community college faculty, an embedded basic skills support guide is now available to provide underprepared students who are taking courses without prerequisites with access to "just in time" embedded resources that address basic skills concepts needed to successfully complete a course. For example, this guide provides "just in time" ADA-compliant resources that can be accessed from their online course to assist students in skill areas related to mathematics, reading, writing, English as a second language and information competency.

Online Counseling

Twenty-four colleges have begun piloting an online counseling platform to provide an efficient way to facilitate individual and group synchronous counseling sessions, online workshops, drop-in/walk-in sessions, and online group presentations. Professional development tools are being produced which will train online counseling staff on the use of the counseling tool available through OEI and provide guidance in best practices for online counseling of online students. This is the first step in the formation of an Online Counseling Network to establish a community of online counselors trained in working with online students using this common technology as well as a forum to establish uniform approaches to online counseling. The counseling tool is available to all California community colleges through the Foundation's CollegeBuys program.

Academic Integrity

Providing faculty and students with resources that verify student identity, detect cheating and identify instances of suspected plagiarism are important components in ensuring the integrity of online courses. The Online Education Initiative ecosystem now includes tools that seamlessly integrate into the faculty and student experience within the Common Course Management System while providing two key ingredients for course integrity:

- **Test Proctoring:** Faculty have the option to use a vendor tool, with its student identity verification technology, to allow their online students to take tests without traveling to a classroom. The tool uses advanced algorithms, activity monitoring and data gathering technologies to enhance the student authentication experience while providing visibility for faculty and colleges into instances of potential cheating. The Online Education Initiative is also laying the groundwork for a proctoring network for online students so that students may take tests at nearby campus proctoring centers

in order to avoid extensive in-person travel requirements. The proctoring tool is available to all California community colleges through the Foundation's CollegeBuys program.

- **Plagiarism detection:** The Online Education Initiative has partnered with a vendor to provide plagiarism detection solutions to participating colleges. In addition to identifying matching content in online websites, repositories and the vendor's database, an additional repository has been established to detect student plagiarism across participating colleges. In addition, the vendor agreement has yielded a 45 percent cost savings over prior competing products and has been made available for piggyback to all 113 California community colleges.

California Virtual Campus (CVC)

The California Virtual Campus website continues to provide information about online courses and programs in California higher education, and provides links to resources that support students as they navigate through distance education in California. The catalog contains more than 20,000 courses and 1,400 programs from 169 institutions of higher education.

In June 2015, the California Virtual Campus catalog was updated to make courses easier to find, to enhance search features to highlight Associate Degree for Transfer courses, to allow access on any mobile device and to update the appearance of the catalog.

THE ECOSYSTEM: ONLINE EDUCATION INITIATIVE EXCHANGE

The Exchange is a registration process that will take place from within the local college registration systems and will allow students to register for courses across colleges without actually enrolling in those colleges. Courses available through the Exchange component of the Online Education Initiative will be open to students across colleges that are members of the Consortium and choose to participate in the Exchange.

Timely completion of student educational goals is often difficult because seats are not available in high-demand "bottleneck" or specialized courses. Currently, students address this issue by enrolling in multiple colleges to meet their degree/certificate requirements (a process referred to as "swirling"). This causes a variety of inefficiencies such as the duplication of matriculation processes. The Exchange will allow students to register from their home college for online classes at other colleges without having to enroll in those colleges.

Some aspects of this project have taken longer than expected because several stakeholders have to coordinate to create the mechanism for cross-registration, and there is a growing awareness of the potential for this technology to become the basis for many other systemic process improvements.

To ensure that all full-launch pilot colleges are fully prepared to implement the Exchange, the Online Education Initiative team, Consortium, Steering Committee and Chancellor's Office agreed in June 2016 to move the initial Exchange pilot launch for the spring 2017 term and align with regular enrollment schedules starting mid-fall 2016. Additional pilot colleges will begin implementing Exchange components in spring 2017 to support registration for the fall 2017 term. Non-pilot colleges are projected to implement Exchange components to enroll students for the fall 2018 term.

Opportunities for Broad Impact

The impact of taking a common approach to quality online ecosystem development is far reaching, and will help lead to increases in systemwide efficiencies, scale in purchasing, common quality standards and access to student success resources that are applicable to the system as a whole.

Applications for Online Education Initiative technologies and resources that reach beyond the scope of the initiative are now being identified. Emerging examples for student success resources include:

- Expanded use of the tutoring platform for students taking face-to-face courses.

- Use of the counseling platform for other student services activities.

- Readiness tutorials are already being incorporated in some student orientations at local colleges.

In addition, the potential for real-time college and systemwide access to information by leveraging the adaptor technology for the Exchange reduces the need for manual data entry, and provides greater real-time access to student and course data.

The Online Education Initiative Consortium is in the process of exploring uses for the Exchange mechanism that go beyond an exchange of course sections. Some identified activities that could be possible through the Exchange process are:

- Offering regional degrees both online and face-to-face, across multiple colleges.

- Offering capstone courses every term as opposed to once a term due to lack of enrollment at a single college.

- Collection of valuable information about student need, currently lost in the swirling process that will inform local enrollment management efforts.

QUALITY ONLINE COURSES WITH EXTENSIVE PROFESSIONAL DEVELOPMENT SUPPORT

The Online Education Initiative and the vendor have collaborated with stakeholders to develop online course design standards, a course peer-review process and associated professional development to increase student success.

- The Online Education Initiative Steering Committee approved the initial initiative course design rubric and effective teaching standards in August 2014.

- The Academic Senate for the California Community Colleges passed a resolution at their November 2015 plenary session encouraging colleges to adopt an online course design rubric. In addition, the Academic Senate is engaged in adopting the Online Standards and Practices course for the Academic Senate Professional Development College project.

- Approximately 400 faculty members have received training in the Online Education Initiative course design standards; 60 faculty members are prepared to be online course peer reviewers and 97 faculty members have participated in the peer online course review process.

- By June 2016, 101 courses have undergone initial peer reviews. Nine courses are Exchange-Ready and 30 are in-progress.

There has been an expansion of online course development and related resources for faculty delivering online courses with a focus on online course design and teaching in the Common Course Management System.

- A broad suite of Online Education Initiative-related professional development is now provided and scaling initiative-related trainings for local use by offering train-the-trainer, online facilitated, online

self-paced options. Downloaded trainings are now available for local trainers who have completed the peer online course review training.

- The Online Education Initiative Course Design Rubric further emphasizes the requirement that course materials be compliant with Section 508 in order to be deemed "Satisfactory to Accomplished" and WCAG 2.0 (AA) standards in order to be identified as "Distinguished to Exemplary" and "can be effectively used with equal ease by all students."

- Instructional design resources are now offered to faculty teaching Online Education Initiative-selected online courses at no cost to their colleges. Additional resources are available to assist in ensuring that online courses are Section 508 and ADA compliant.

Online Education Initiative-related professional development has significantly expanded with more than 400 California community college faculty and support staff from 108 colleges involved in activities related to online course development and application of the Course Design Rubric to course re-designs. Professional development, such as the recently redesigned resource that introduces faculty to teaching in the Common Course Management System, has experienced a surge in demand. A total of 432 attendees at 79 California community colleges participated in the 15 sections of the facilitated course during Year 3. In addition, 1314 have registered for the self-paced course. Weekly scheduled support calls for Common Course Management System are also available to faculty.

In addition, the OEI provided seed funding to TTIP South for the development of the "Professional Learning Network," launched in April 2016 to provide California community colleges with access to reviewed professional development resources and online training opportunities. From the start, the Online Education Initiative team ensured that the Professional Learning Network included information about Online Education Initiative resources with links to more details on the initiative website.

IN SUMMARY

Working closely with the California community colleges and the Online Education Initiative Steering Committee, the management team and participating colleges are now demonstrating successful pilot implementations, have accelerated CCMS deployments, and are in the late stages of developing the initial Exchange.

In addition, the first student success resources for online learner readiness, online tutoring, embedded basic skills, online tutoring, online proctoring and online counseling support are now available systemwide; additional student success resources such as online plagiarism detection and course accessibility diagnostics will soon be made available.

With 99 percent college participation in some aspect of the project, the initiative is greatly surpassing its original goal of 40 percent participation in the Online Education Initiative by colleges at the end of this reporting period.

COMMON ASSESSMENT INITIATIVE

THE COMMON ASSESSMENT INITIATIVE (CAI)

The California Community Colleges Chancellor's Office (Chancellor's Office) awarded the Common Assessment Initiative Grant to the Butte-Glenn Community College District in December 2013. The overarching goal of the initiative is to develop a comprehensive common assessment system that will:

- Align to state legislation.

- Reduce unnecessary remediation.

- Provide statewide efficiencies.

- Effectively support faculty and staff.

- Enable more accurate student placement, resulting in more successful student outcomes.

The assessment will take the place of a number of different tools currently used by colleges to test in the areas of math, English and English as a second language. The system will integrate multiple measures and assessment preparation while providing for professional development and a centralized data warehouse.

Partners in the Common Assessment Initiative include the California Community Colleges Technology Center with headquarters at Butte College, Cal-PASS Plus (based at San Joaquin Delta College), Saddleback College and the Academic Senate of California Community Colleges (Academic Senate).

Legislation and Associated Funding

- SB 1456 (**https://www.cccassess.org/documents/all-documents/historic-cai-documents/legislative-documents/9-sb-1456-bill-language**)

- AB 743 (**https://www.cccassess.org/documents/all-documents/historic-cai-documents/legislative-documents/10-ab-743-bill-language**)

- 2013-14: $8 million

- 2014-15: $8 million

- 2015-16: $6 million

- 2016-17: $6 million

- 2017-18: $6 million

Work began in earnest in early 2014 with the establishment of a comprehensive project website, the Common Assessment Initiative, to provide general project updates and critical information to

stakeholders and interested individuals. A steering committee representing faculty, student services and assessment staff, researchers and administrators, meets monthly.

In addition to the Common Assessment Initiative Steering Committee, there are a number of work groups and committees engaged in the work of the initiative. There is purposeful overlap between members of the Steering Committee and faculty and staff from pilot colleges on each of the following work groups/committees:

- English Work Group
- Math Work Group
- English as a Second Language Work Group
- Multiple Measures Work Group
- Test Development Process Work Group
- Professional Development Work Group
- Platform and Reports Work Group

Throughout summer and fall 2014, faculty work groups created Assessment Competency Maps in Math, English and English as a Second Language. The use of these competency maps will allow for the collection and reporting of detailed student data to assist colleges in making more effective local placement decisions. For reference, competency maps are located at the Chancellor Office website, Common Assessment Initiative page.

The Common Assessment Platform (infrastructure) realized numerous milestones between July 1, 2015 and June 30, 2016. During this time, the product manager and development project team began collecting and prioritizing business requirements to design the system. The development efforts focused on the creation of an initial product to facilitate pilot testing that occurred in the spring of 2016. The pilot testing version of the platform enabled the delivery platform to administer both electronic and paper/pencil administration of assessments. From the pilot-testing version, development efforts focused on the creation of essential functionality including the placement model management, assessment-based placement recommendations and key reporting functionality.

PILOT COLLEGES

In May 2014, applications were requested from colleges wishing to participate in the pilot phase of the Common Assessment Initiative. Thirty-five applications were received and the following twelve colleges were chosen based on a broad representation of geography, demographics, student population size, college size and Student Information Systems in place.

- Bakersfield College
- Butte College
- Chaffey College
- DeAnza College
- Diablo Valley College
- Fresno City College
- Rio Hondo College
- Sacramento City College
- Saddleback College
- San Joaquin Delta College
- Santa Monica College
- West Los Angeles College

ENVIRONMENTAL SCAN

An environmental scan was released in May 2014, providing insights from other states across the country that have created or are in the process of creating a statewide common assessment system. A copy of the report can be found at the Chancellor's Office website-Environmental Scan report. Information gleaned from those ahead of California in the process has been incorporated into the work plan to leverage lessons learned by others.

REQUEST FOR PROPOSAL AND VENDOR SELECTION

A comprehensive Request for Proposal was issued in December 2014, seeking vendors and test publishers to propose solutions for California's Common Assessment System. Two successful vendors were identified. The Common Assessment Initiative has partnered with these vendors on the creation of CCCAssess. The project is developing the Software Platform and test development tool in the content areas of English, math and English as a second language.

The solution selected required a custom-built assessment system due to the fact there were no commercial off-the-shelf products that met the systems' business needs. The custom build is designed to meet the needs of California's diverse student population. Ownership of the platform and faculty- developed content will save potentially millions of dollars systemwide through elimination of individual vendor contracts and existing per-student testing fees.

Test Item/Content Development

In July 2015, a group of faculty representing all three content areas met with the project team, including the selected vendors, to begin discussions regarding content creation. By the conclusion of that event, all participating faculty members had access to the customer extranet and were able to begin reviewing test items for accuracy, quality and bias. As of March 2016, there were approximately 1,800 test items that had progressed through the three-staged review and were considered ready to pilot.

Also during that time, the product manager and development project team began collecting and prioritizing business requirements to direct the development process.

Local Implementation Teams

Colleges are encouraged to form local implementation teams to lead the adoption of CCCAssess, with this Implementation Guide as reference.

Members of the local teams include:

- Instructional Faculty

- Counseling Faculty and Staff

- Assessment Center Staff

- IT Staff

- Researchers

- Administrators

Pilot Phase/Data Collection

As the CCCAssess platform was being developed, plans were put in place to begin piloting both the platform and the content in the spring of 2016. Relationships were forged with the Local Implementation Team leads and plans were put in place for the piloting process. The product and program manager traveled to each of the twelve pilot schools to meet with IT, administration, assessment, research, counseling staff and faculty. These meetings were instrumental in creating highly functional relationships with onsite staff and the project team. In March 2016, piloting began. Over the course of the next several weeks, 10,476 math and English Language Arts assessments were piloted. Project staff was in constant communication with affected staff members at the pilot schools. Weekly calls were held, along with multiple webinars, to inform stakeholders throughout the process. Both during and at the completion of piloting, the psychometric team analyzed data in nearly real time.

Data Collection and Analysis for Validation

- 409 English Items in 52 Testlets

- 592 ESL Items in 63 Testlets

- 855 Math Items in 89 Testlets

- 10,972 Lines of Data Analyzed

- 31 Pages of Written Analysis

- 6 Appendices

- 47 Follow-up questions

EDUCATION PLANNING INITIATIVE

3

The California Community Colleges Technology Center (Technology Center) promotes technology programs that support student success by encouraging colleges to work together for student and institutional success and achieve savings through economies of scale. The Technology Center received funding from a fiscal year 2014-15 $6,000,000 Chancellor's Office grant to the Butte-Glenn Community College District to conduct the Education Planning Initiative.

Education plans are not a new idea. Institutions have recognized education plans to be an effective intervention and have been doing them in a limited way for years. Why are we investing in them now?

- **Leverage Existing Counseling Services:** With more than 1,800 students for every counselor, technology can automate and integrate many steps of the education planning process, creating the potential for **every student** to have a current education plan. These will yield more effective outcomes that leverage the existing counselor-student resource investment.

- **Improve Return on Investment:** 23 percent of full–time California community college students graduate or transfer. Students' participation in their education planning efforts will likely provide greater focus and a sense of accomplishment, helping strengthen their commitment to completing their goals and realizing the benefits from their investment.

- **Reduce time to graduate:** In 2011–12, California community colleges provided instruction to more than 350,000 students who already had earned 60 or more degree–applicable semester units. Of these students, nearly 95,000 had earned more than 90 units. Education plans that are highly visible, current and relevant to a specific goal will reduce time to graduate and help to eliminate unnecessary courses.

- **Improve Efficiency:** Today a wide range of isolated websites address individual aspects of the planning process. These websites are costly, difficult to find, generally not integrated and have overlapping functions. An integrated and student-tailored education planning process reduces the investments required by colleges and support organizations.

- **Support Education Planning Across All Colleges:** Adoption of statewide education planning solutions is a local district choice. To support all solutions, the Education Planning Initiative is working to provide essential centralized data in the areas of electronic transcripts, course articulation, and curriculum inventory.

The Education Planning Initiative will develop, deploy and support an integrated statewide student services portal that will:

- Help students make informed choices based on clear goals and a consolidated, personalized, sequenced plan.

- Support management solutions, e.g. planning future class loads, avoiding delays for students due to lack of course section offerings.

- Align to state legislation, supporting the Student Success and Support Program requirements for funding and providing statewide efficiencies.

CONSOLIDATE AND PERSONALIZE KEY INFORMATION WITH MYPATH

MyPath, the new statewide student portal, integrates a broad range of existing student services that are today scattered across more than a dozen websites, putting them in a logically organized and personalized environment, reducing the effort required by busy students. MyPath was also built with the flexibility to allow colleges to implement the application and student matriculation workflows that are appropriate for their colleges.

Key Features of MyPath:

- Full service communications engine, including email, MyPath inbox and SMS text message capabilities.

- Fully responsive and mobile-friendly user interface.

- College specific customizable content and branding.

- Prescriptive task based user interface, walks students through workflow step-by-step.

- Student services (e.g. disabled students, transportation, and veterans' services).

- Implementation and support services.

- Career and college exploration.

- College application.

- Financial aid.

- New student orientation.

- Education planning and degree audit.

- Student retention (Early alert services).

- Web Content Accessibility Guidelines 2.0 AA compliance.

Figure 1. CCC MyPath Student Services Portal

MyPath (shown above with Santa Rosa Junior College branding and content) can be accessed directly by students who are making initial forays into their college careers, integrated with local colleges or via existing statewide portals such as the **California Colleges website**.

Nearly 2.1 million applications for admission are processed each year. All students applying for admission will be messaged through the new statewide portal with essential information to be successful in college.

The portal can be adopted all or in part by individual colleges, with appropriate "branding" by each college to fit with their individual character and needs. The portal and all of its components are available to colleges at no cost, providing an attractive alternative for procurement and maintenance of existing systems and support services.

COLLABORATIVE DEVELOPMENT ENVIRONMENT

Partners in the Education Planning Initiative include the California Community Colleges Technology Center (Technology Center), the Academic Senate of California Community Colleges (Academic Senate), the Research Professionals Group and our ten pilot colleges.

To support transparency, communications and collaboration, a comprehensive marketing plan and project website was established to provide general project updates and critical information to stakeholders and interested individuals. Find the website, and ongoing project news, at https://cccedplan.org/

Close collaboration with the California Community Colleges Chancellor's Office team ensures transparency and coordination with statewide initiatives, including the Student Success and Support Program, Student Services, Communications, Institutional Effectiveness, Workforce and Economic Development, and Academic Affairs.

The program's governance structure further supports transparency and collaboration. Five overlapping committees provide detailed subject matter expertise and objective overarching guidance. The composition of each committee is coordinated with statewide organizations to reflect faculty, student services and assessment staff, information technology, security, researchers and administrators. These committees have met monthly since March 2014 to develop detailed requirements, coordinate work with colleges and guide the development of Education Planning Initiative solutions.

A number of statewide California community college information technology organizations support the Education Planning Initiative to ensure interoperability and compliance with best practices:

- Statewide Architecture Committee (SAC)

- Telecommunications and Technology Advisory Committee (TTAC)

- California Community College Security Center

PILOT COLLEGES

In May 2014, applications were solicited from colleges wishing to participate in the pilot phase of the Education Planning Tool and Degree Audit System portion of the Initiative. Ten colleges applied and were chosen, representing a broad sample of geography, demographics, student population size, college size and Student Information Systems.

By February 2015, the pilot college landscape was beginning to change. Colleges that were part of multi-college districts indicated that their district "sister campuses" must be included in order to proceed with the piloting process. A district approach was adopted that includes 13 colleges across eight districts:

- City College of San Francisco

- Contra Costa College District

  - Los Medanos College

  - Contra Costa Community College

  - Diablo Valley College

- State Center Community College District

  - Fresno City College

  - Reedley College

  - Clovis Center Community College

- San Bernardino College District

  - Crafton Hills College

  - San Bernardino College

- Santa Barbara City College

- El Camino Community College

- Victor Valley College

- Santa Rosa Junior College

PROCUREMENT AND VENDOR SELECTIONS

The Education Planning Initiative governance sought to leverage recent improvements and availability of innovative commercial off-the-shelf software whenever possible. A key mission of the steering committees is to define operational processes and technical standards to facilitate the goals and objectives of the Education Planning Initiative grant.

These processes include defining requirements for the end product that will be provided to the user, and the need of procurements are defined as these requirements take shape. To support the Education Planning Initiative mission thus far, two RFPs have been defined, released and awarded, with several more driven by discovery and evaluation efforts currently underway.

The statewide student services portal software development RFP was released in October 2014. After review of many vendor submissions, scoring against defined criteria and discussion of the best possible solution for the California Community Colleges, two vendors were chosen to support development of the portal. The chosen solution makes the best possible use of available open source software commonly used by other major higher education institutions and provides the flexibility to adapt the solution to evolving needs of our community colleges and students. A second RFP was issued in December 2014, whereby a vendor was selected to provide a comprehensive education planning and degree audit system

THE PATH AHEAD

- Pilot implementations began with technology team orientations completed in March 2015. By December 2015 a phased release and implementation aimed at producing a "production ready" solution at the pilot colleges was completed. Next steps will continue the culture of collaboration and shared learning in pursuit of our shared goals of Student Success. MyPath went live at Santa Rosa Jr. College on December 12, 2016 and live at the Chancellor's Office for statewide use on December 15, 2016.

- MyPath Student Services portal toolsets: Available for college implementation in December 2016 with ongoing support, creating accessible, secure, mobile-friendly and equitable access to tools and services promoting student success.

- Starfish education planning, degree audit, retention and early alert toolsets: In production operations with new colleges coming on board (see numbers in deck).

- California Community Colleges Chancellor's Office Curriculum Inventory System: Complete development of core services in December 2016 with deployment over the course of spring 2017 and ongoing support.

- Articulation: Complete development of core services for the statewide Course Identification System with deployment over the course of spring 2017 and ongoing support. Complete integration of Course Identification System with the new ASSIST Next Generation (Next Gen) to support community college transfers to the California State University and University of California systems.

- Transcripts: Expand and continue operations of eTranscript California, implement standardization and security improvements with implementation of the PESCPostsecondary Electronic Standards Council standards-based EdExchange system, adding student ordering and streamlining the exchange of on-line student records between teaching colleges and home colleges

The table on the following page provides a long-range forecast of program activities for the fiscal year periods from July 2014 through June 2019.

Program Component	2015	2016	2017	2018	2019
New Ed Planning, Retention, Degree Audit Tools					
13 College Pilot/Implementation	■	■			
Implement Additional Colleges		■	■	■	■
MyPath Statewide Student Services Portal for All Students					
Development/Pilot	■	■			
Implementation/Operations		■	■	■	■
Data to Support All Colleges in Ed Planning and Degree Audit					
Articulation					
C-ID: Web Services, ADT	■	■			
Support CCC-CCC Articulation		■	■	■	■
Curriculum Management					
Plan for Improvement	■				
Design, Procurement	■				
Implementation/Operations		■	■	■	■
Electronic Transcripts					
Incentives for CCC Expansion	■				
Enhanced Data Transport Services		■			
Improved eTranscript California		■			
Implementation/Operations		■	■	■	■

Please find contact and program information at **https://cccedplan.org/**.

TELECOMMUNICATIONS AND TECHNOLOGY INFRASTRUCTURE PROGRAM — TTIP NORTH

TTIP North, also known as the California Community Colleges Technology Center, incorporates the following programs:

California Community Colleges Technology Center Initiatives	
CENIC / CalREN Network Administration	Partners with CENIC to leverage the California Research & Education Network (CalREN) to provide cost-effective network resources and internet connectivity for colleges.
CCCApply	Systemwide Online Admission Application provides colleges and students with a common web-based application for admission to college and online Board Of Governors' fee waiver.
OpenCCC	Systemwide Student Account providing a common student ID and Single Sign On for systemwide applications.
CCC Information Security Center	Identify security needs and provide solutions to help the colleges protect student data and promote information assurance.
CCC Accessibility Center	The CCC Accessibility center seeks to inform and support colleges in building an accessible electronic and information technology environment for current and prospective students, faculty, staff and members of the public.
Systemwide Technology Platform	A technology architecture that provides consistency and cohesion for systemwide applications, which employs: Federated Identity, Service Oriented Architecture, Enterprise Portals, Elastic Cloud Infrastructure and Business Intelligence.
LISTSERV Services, Web-Hosting	Manages community college LISTSERVs and hosts websites for statewide projects and CCC Organizations.
Library Automation and Electronic Information Resources	Electronic Information Resources purchased through statewide acquisition to achieve economies of scale.
CCC TechEdge	CCC TechEDge, the system technology newsletter, provides current information about systemwide technology efforts and the people bringing innovative technology to the California Community Colleges.
Governance	The Technology Center directly supports the Systemwide Architecture Committee, Telecommunications & Technology Advisory Committee and Information Security Advisory Committee.

Funded by the TTIP North grant from the California Community Colleges Chancellor's Office, the California Community Colleges Technology Center, hosted by Butte College, facilitates and coordinates the work of systemwide technology projects by:

• Providing project leadership

• Providing technology services

• Disbursing funds and managing contracts

• Developing external funding resources

• Publicizing the progress of projects

• Facilitating technology governance

The Technology Center's goal is to provide secure, scalable and integrated technology solutions for the California Community Colleges that take advantage of economies of scale and facilitated by governance from the colleges themselves.

## CENIC / CALREN NETWORK — INTERNET CONNECTIVITY FOR THE COMMUNITY COLLEGES

Partnering with the Corporation for Educational Network Initiatives in California (CENIC) to use the California Research and Education Network (CalREN), a high-bandwidth, high-capacity internet network that consists of 3,800 miles of CENIC-owned and managed fiber, has resulted in millions of dollars in savings for the community colleges. This strategy supports the Telecommunication and Technology Infrastructure Program mission and answers the growing needs of faculty, staff and students.

CENIC designs, implements and operates CalREN specifically to meet the unique requirements of the education and research communities. CENIC consists of charter members from the University of California, California State University, the California Community Colleges and K-12, Stanford, California Institute of Technology and the University of Southern California. For more information, see **http://www.cenic.org**.

THE CORPORATION FOR EDUCATIONAL NETWORK INITIATIVES IN CALIFORNIA CURRENTLY PROVIDES:

- Centralized funding and invoicing to California Community Colleges Internet connection at all 113 college and 72 district sites at no local cost.

- Primary connection at all colleges to CalREN for data, internet access and video.

- Diverse secondary/backup connection at approximately 50 percent of college and district sites.

- More than $2 million in savings annually on Core Network Backbone costs through the California Teleconnect Fund program because of CENIC's initiative with the California Public Utilities Commission, which commenced in July 2011.

- An average of $4 million savings annually over the past 5 years on colleges' circuit/connectivity costs through the California Teleconnect Fund program, a 50 percent discount over the costs at the individual college level.

The $15.3 million (65 percent reduction) in Telecommunications and Technology Infrastructure Program funding remained in place through fiscal year2013-14. Throughout this time period, CENIC partnered with the California Community Colleges to keep existing connections operational and lower costs through inter-segmental aggregation of demand across the education community in California.

Reduction in Circuit Costs Over Time

Average Monthly Circuit Cost
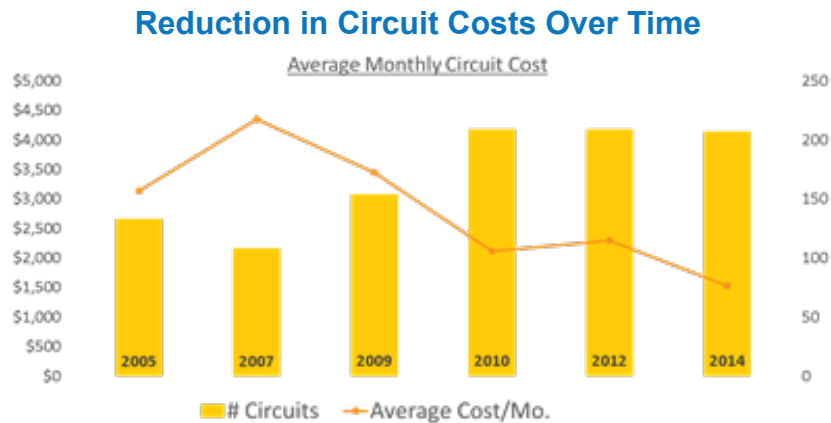
UPGRADING CONNECTIVITY

In fiscal year 2014-15, additional funds were made available to shore up connectivity. One-time funds of $1.4 million were allocated to replace end-of-life equipment and ongoing funds of $4.6 million were allocated to restore circuits and upgrade existing circuits.

At that time, the following areas of concern arose:

- 15 of 113 California community college campuses did not have a centrally funded backup connection to the Internet.

- 12 of 113 colleges had saturated primary connections, where there was more internet traffic moving through the circuit than the circuit could support.

- 64 of 113 colleges had saturated backup connections.

- 63 of 77 approved off-site centers did not have a centrally funded primary or a backup connection to the internet.

The new funds were allocated specifically for:

- Payment for upgrade of all primary and secondary circuits that were DS-3 or lower bandwidth to 1Gig connections at all college, district and center sites.

- Addition of 1Gig diverse secondary circuits to all college and district sites that did not currently have a backup connection.

- Addition of 1Gig primary circuit connections for all approved off-site centers.

- Ongoing monthly circuit costs for all current and new college, district and center primary and secondary connections.

- Upgrade of end-of-life circuits and related equipment for all college, district and center sites.

End of Year Fiscal Year 2015-16 Accomplishments:

- 157 circuits upgraded.

- 78 circuits in progress or in need of review.

The primary delay for remaining circuit upgrades has been centered on the various carrier's capacity to perform and an issue between carriers, which has since been resolved. Due to the delays in circuit upgrades, the 2014-15 Telecommunications and Technology Infrastructure Program-CENIC account had a balance of $6,390,160.20 at Year End Closing on June 30, 2015. For the $1.4 million one-time funds for replacement of end of life equipment, the entire amount has been allocated to an estimated $1.75 million equipment replacement cost with an additional $350K having been previously been held in reserve for this purpose. Of the $4.5 annual allocation, known annual circuit cost estimates for upgraded circuits are currently $3. 3 million, however, a number of circuits have yet to be costed. We expect that as circuit upgrades are brought online and additional circuits are added for off-site centers, the remaining amounts will be expended.

SYSTEMWIDE ONLINE ADMISSION APPLICATION — CCCAPPLY

CCCApply is a web-based student application process available to all community colleges and is funded through the Butte College Technology Center grant. The CCCApply site (**www.cccapply. org**) provides comparative descriptions of the colleges and their programs in an efficient, automated program. To date, 107 colleges subscribe to CCCApply.

In fiscal year 2015-16, CCCApply processed more than two million applications for Admission to the California community colleges.
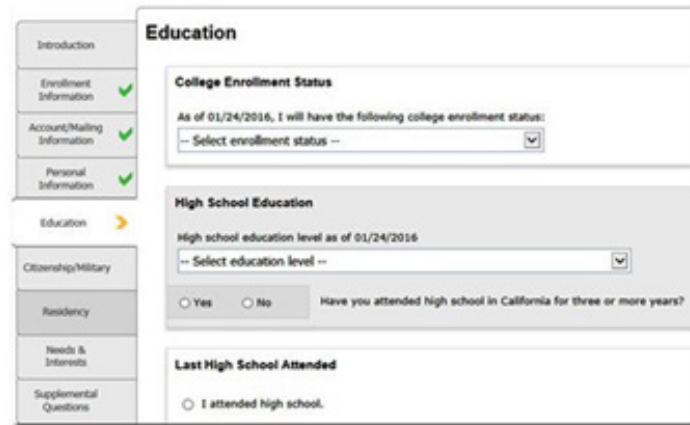
The CCCApply suite comprises an online application for admission, Board of Governors' Fee Waiver and application for international students.

Developed and operated by the California Community Colleges Technology Center, the new CCCApply online application, release in November 2012, is owned by the California Community Colleges Chancellor's Office, and governed by the CCCApply Steering Committee representing admissions, IT and research professionals across 13 districts.

Intuitive Interface

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*Ongoing student surveys indicate
98 percent satisfaction with CCCApply.*

The clean look of the user interface and the easy feel of the intuitive tab based navigation streamline the application process for students.

Students only see what they need to see.

Tab Based Interface: Intuitive page tabs promote easy navigation between pages of the application.

Conditional Questioning: For students, the application seems far more manageable as they are only presented with questions they need to answer.

Search as You Type School Finder: A lightning fast high school and college finder greatly increases accuracy in providing the college with viable school codes and reduces hand entry of schools.

Built in Help for English and Spanish Speakers: Field level Hover Help (tool tips) is available in both English and Spanish, better informing Final Review, which allows students to catch errors and reduces support calls to Admissions and records offices.

OpenCCC Account Data Integration: Students need only verify their personal account information and it is automatically included into their application. This reduces errors and tedium in reentry.

Final Review: Students can now review their application data just before submitting their applications, thus reducing errors.

Eliminates Duplicate Records: Unique OpenCCC accounts eliminate duplicate records saving time and errors for admissions, IT and college management systems.

Superior Support Systems

Re-designed for student success, the new CCCApply has all new support services – including an improved 24/7 Help Desk call center and CCCHelp.info, an on-demand, community-powered, support site providing official FAQs and online support to students as they apply to college and navigate the community college system.

24/7 Help Desk Call Center: To ensure our students get the accurate and immediate support needed when applying to college, the Technology Center has set up a world-class, professional telephone support with a 95 percent customer satisfaction rate.

Answer in 30 Seconds or Less: The vendor has guaranteed that a human service representative will answer 80 percent of support calls in 30 seconds or less and resolve 85 percent of all first-time caller issues.

Self-service and Easy Password Recovery: User self-service account recovery removes frustration and helps students reuse existing accounts eliminating duplicate records to colleges.

Support for Admission & Records: Call center support increases communication with students, sends referrals back to Admissions and Records offices and lessens the demand on the college's helpdesk.

CCCHelp.Info: An online, on-demand, support community with a scalable knowledge base, which addresses common questions in areas such as admissions, financial aid, transfer, etc. CCCHelp. info community forum reduces phone calls to Admissions and Records offices and other college departments. It also promotes dialogue about problems and ideas encouraging continuous improvement in CCCApply and other systems.

End of Fiscal Year 2015-16 Status and Benefits

Cost Savings: The California Community Colleges Chancellor's Office now owns and operates CCCApply, thus leveraging economies of scale to eliminate the need for institution based hosting fees that ranged from $12,000 to $25,000 per year for each college.

❖ **OpenCCC Accounts**
2,657,652

❖ **CCCApply Submitted Apps**
3,243,278

❖ **BOG Fee Waiver Apps**
174,410

Accomplishments:

- Systemwide, 105 colleges are using CCCApply; eight are implementing.

- Systemwide, 28 colleges are using the online Board of Governor's Fee Waiver; 53 are implementing.

- Release of the international student application.

- Integration of questions in CCCApply that support multiple measures.

- Auto-population of a new application from prior applications.

- Addition of preferred name fields to support transgender students.
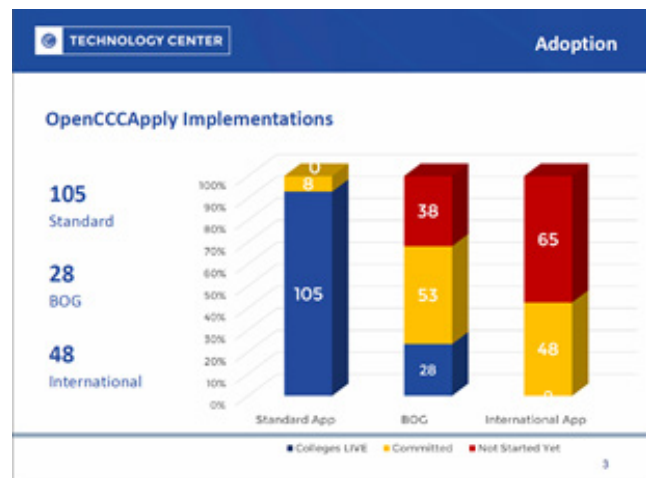
OPENCCC FEDERATED IDENTITY FOR STUDENTS

OpenCCC is the new California Community Colleges federated identity initiative, developed by the California Community Colleges Technology Center. OpenCCC allows staff and students access to web-based technology applications such as those envisioned in the Common Assessment Initiative, the Education Planning Initiative, and Online Education Initiative across the System via one common, single sign-on account. OpenCCC operates within the InCommon Federation along with CSUConnect (California State University), UCTrust (University of California), government entities and companies across the U.S.

The CCCID: Creating an OpenCCC account generates a unique identifier called the CCCID, which stores the user's personal identification data in an Identity Center. The CCCID is the master link between the Identity Center, admission applications and other systemwide services.

When users are authenticated to use a systemwide service or application, the CCCID will be passed to the service to identify the unique individual. In this way, services and applications can maintain personal accounts for the user anonymously, thus ensuring privacy for the user.

Data Integration: The CCCID is planned to be used to pass unique individual identity information between the college and the Chancellor's Office for reporting purposes.

ENHANCED SECURITY & PRIVACY WITH A SYSTEMWIDE STUDENT ACCOUNT

The OpenCCC systemwide student account system safeguards student identity information and delivers maximum protection through enhanced security measures, including requiring a social security number, unique PIN, additional security questions and a monitored password recovery system that requires management level authority to reset account information.

- **Federated Identity:** Staff members use their own college account to authenticate into applications. Should a staff member leave, access to sensitive data will shut down with their college account deactivation. This eliminates forgotten accounts that create FERPA issues.

- **Encryption of Data at Rest:** Student Personally Identifiable Information (PII) is stored in a hardened data center with 24/7 threat monitoring and security audit. Sensitive data such as social security numbers are encrypted at rest.

- **Encrypted Data Transport:** Only secure web services that incorporate financial industry level security are used to send and receive sensitive student data.

- **Enhanced Security Questions:** Well-crafted security questions for each OpenCCC account increases the chances that students can recover their account if they have forgotten their password.

- **Security for Public Computers:** Account timeouts now help protect users that forget to sign out. In addition, a PIN question will be used to re-verify users before sensitive activities such as printing an application.

- **Digital Signatures:** Each submitted application is digitally signed with public key encryption ensuring data integrity and attribution to one student.

End of Fiscal Year 2015-16 Status

More than 2.6 million students with OpenCCC Accounts and CCCID systemwide IDs.

Systemwide, 105 colleges are storing the CCCID into their Student Information Systems.

This status prepares the system to tie student data together within the **Education Planning Initiative, Common Assessment Initiative and Online Education Initiative** to raise student outcomes and facilitate institutional improvement.

Accomplishments:

- New account recovery system reduced support issues by 60 percent.

- RFP conducted for new five-year support contract.

- Federation software setup at 105 colleges.

- Membership to InCommon identity federation for all colleges.

CALIFORNIA COMMUNITY COLLEGES INFORMATION SECURITY CENTER

The California Community Colleges Information Security Center (Information Security Center) works to coordinate, prioritize and oversee the policies, goals and procedures for the information security functions of the California Community Colleges Technology Center.

The Information Security Center also works to ensure systemwide information security efforts are coordinated, in compliance with reducing overall security risk and are under explicit management control. The Information Security Center is also responsible for establishing and maintaining a framework to ensure that information security strategies align with California Community Colleges Chancellor's Office objectives and are consistent with applicable laws and regulations.

The California Community Colleges Technology Center launched the Information Security Center in March 2013. Information is located at the following address: **https://cccsecuritycenter.org**. The website provides information security information, as well as informs the California community colleges of free information security services provided by the Technology Center.

Information Security Governance

In the following months, the California Community Colleges Technology Center worked on creating the California Community Colleges Information Security Center to help colleges develop their information security programs. The Information Security Center formed a systemwide committee, the Information Security Advisory Committee, consisting of members from 28 different community colleges. The focus of the advisory committee is to help rectify some of the deficiencies identified in the survey. The committee meets monthly and discusses information security topics such as policy, procedure, security tools, training and best practices. The committee thus far has published 12 Administrative Regulation templates, a white paper and a comprehensive information security standard.

Information Security Awareness Training

To address the lack of information security awareness training available at community colleges, the Information Security Center has access to licensed online video training. The SANS Institute, a leader in information security training, produces the video training. The video training is self-paced; it is aimed at educating everyday computer users on best security practices, including how criminal hackers can gain access to the college's information resources. Staff members receive a certificate of completion after completing the training. Reports can also be provided to the colleges. This training is available to all California community college staff and is free to the colleges.

California Community Colleges Information Security Standard and Board Policy

To address the deficiencies in information security policy, a comprehensive information security standard was created. This standard builds the framework for an Information Security Management System. It lays out the best practices in the areas of risk management, privacy, security awareness and training, third parties, change control, access control and many other areas. The Information Security Advisory Council reviewed and edited the policy, created in the Systemwide Architecture Committee. The Community College League of California, Chief Information Systems Officer Association and Gartner, a leader in IT consulting, also reviewed the standard. Colleges can now implement the standard. A board policy and administrative policy template has been created for college boards to officially adopt the standard. We will continue to update and expand the information security standard as technology and practices change.

The Information Security Advisory Council is working on implementing best practices documentation for common enterprise software used in the California community colleges environments, such as colleague and banner. The advisory council is also working on implementing peer reviewed information security audits of the community colleges. The California Community Colleges Security Center will continue to offer security services such as awareness training and will identify and implement other security services that may be useful to the community colleges.

End of Fiscal Year 2015-16 Status

Accomplishments to Date:

- Two information security training workshops attended by staff from more than 30 colleges.

- Information security audits conducted at three districts, CalPASS+ and the California Community Colleges Chancellor's Office.

- Negotiated contract for a no-cost Security (SSL) Certificate Program saving an estimated $500,000 for the colleges.

- Community College League of California reference of information security policy in acceptable use policy.

- Twelve information security administrative procedures published.

CALIFORNIA COMMUNITY COLLEGES ACCESSIBILITY CENTER

As a new initiative of the Technology Center, the California Community Colleges Accessibility Center provides technical expertise, policy guidance and implementation solutions specific to electronic and information technology accessibility for individuals with disabilities.

The Accessibility Center seeks to inform and support California community colleges in building an accessible electronic and information technology environment for current and prospective students, faculty, staff and members of the public.
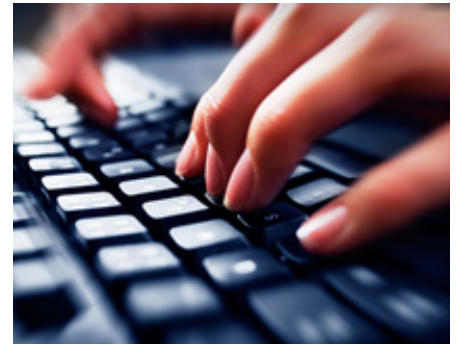
The Accessibility Center facilitates and coordinates the work of systemwide IT accessibility by:

- Understanding current IT accessibility demands

- Promoting IT accessibility awareness

- Publishing IT accessibility best practices

End of Fiscal Year 2015-16 Status

The new Accessibility Center now provides the following tools and services for colleges:

- Tools for site-wide evaluation

- In-browser tools

- Color contrast analysis software

Advice and training for the colleges in the areas of:

- Accessible web design

- Accessible document creation

- Video and media accessibility

- Automated and manual accessibility testing

Guidance, policies and standards in the following areas:

- Electronic and information technology best practices

- Electronic and information technology accessibility standards

- Compliance and issue reporting

- Vendor interactions and purchasing

CALIFORNIA COMMUNITY COLLEGES
SYSTEMWIDE TECHNOLOGY PLATFORM

The California Community Colleges Systemwide Technology Platform provides a foundation for new systemwide applications composed of five key technologies (see below). CCCApply, the new application for admission, was used as the proof of concept and implementation vehicle to spread adoption across the system.
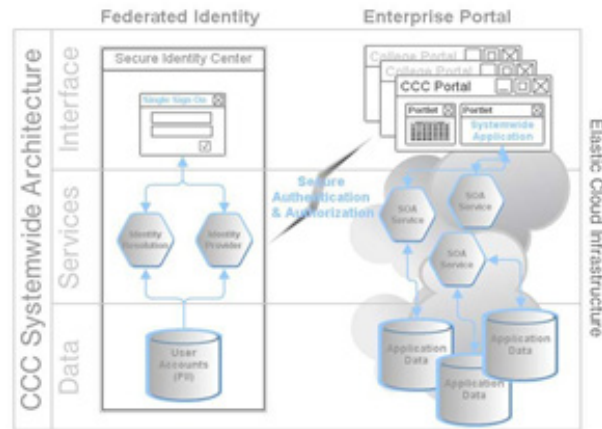
The Technology Center strives to improve education and educational services and is committed to innovation and student success.

The Technology Center serves students and supports student success by establishing the technical platform that supports the initiatives set forth by the Student Success Taskforce and ultimately SB1456, the Student Success Act of 2012.

Student Success Taskforce Recommendation 2.3

Community colleges will develop and use centralized and integrated technology, which can be accessed through campus or district web portals, to better guide students in their educational process.

The Technology Platform developed by the Technology Center provides solutions designed for and made available to all colleges in the California Community Colleges.

The Technology Platform is composed of the following technologies:

Federated Identity

- Enables a common login for the student and staff across applications and institutions while increasing security and privacy.

- The greatest potential benefit for the Chancellor's Office may be in transferring student account data to California State University (CSU) or University of California (UC).

- CSU and UC have Federated Identity initiatives based on the InCommon Federation.

- The InCommon Identity Federation includes more than 500 higher education institutions, government agencies, and vendors.

With the rollout of OpenCCCApply, built with the California Community Colleges Technology Platform, 66 colleges have adopted Federated Identity and another 30 are implementing. More than 500,000 student accounts have been assigned the new systemwide student identifier (CCC-ID), which will help tie disparate student data together as students attend multiple community colleges over the course of their academic careers. Currently, the Technology Centers is in negotiations with Internet2 to provide InCommon Federation membership for all of the colleges.

Service-Oriented Architecture

- Deconstructs isolated systemwide applications into their component services and connects those using secure Internet communications.

- This enables component services to be reused by college or vendor applications and combined into composite applications.

Currently, web services are built within OpenCCCApply to facilitate secure access by software applications to students' personally identifiable information. Through the Education Planning Initiative Grant, the Technology Center is working with ASSIST, an online student-transfer information system, to provide articulation via web services to degree audit and online education planners. The Technology Center is also building web services with Postsecondary Electronic Standards Council EDExchange, a web services network that will facilitate global exchange of educational data across California and the country.

Enterprise Portals

- Most colleges use web portal interfaces for students.

- Systemwide applications are provided as portlets so colleges can easily provide additional services and functionality for students.

An examination of portal technologies was conducted in 2009 to select a portal technology that would both be compatible with many college portals, and be proven to scale to the millions of user accounts. CCCApply was written as a portlet, and operates within a portal environment. The environment currently supports tens of thousands of user logins per day.

Elastic Cloud Infrastructure

- Elastic cloud platforms move the computing power behind deployed applications.

- The platform is monitored and will scale up or down depending on demand.

- The dynamic system has made it possible to efficiently support the annual cyclic student demand on student services applications without having to build a large data center to handle peak loads.

- This efficiency will result in lower costs to the colleges.

The CCCApply system, with 105 colleges currently in operation, is deployed on a Hybrid Cloud infrastructure where students' personally identifiable information is stored within a hardened infrastructure (Secure Identity Center). This data are securely connected through a high-speed backplane and secure web services to applications in a multi-tenant Elastic Cloud infrastructure where computing capacity can be scaled to meet demand. This efficient architecture mitigates expense by alleviating the need to build a data center that is constantly capable of meeting peak demand, when in actuality the demand fluctuates throughout the year with admission cycles. This

same infrastructure will be used to deploy the new systemwide technologies associated with the Student Services Support Program and Online Education Initiative.

Business Intelligence

The Chancellor's Office has identified a need to bring together disparate data sourced from the existing applications within our system, and tie it together into structures that can be easily researched and presented to end users. In response, the California Community Colleges Technology Center facilitates analysis of student pathways, outcomes, transfer and institutional performance for continuous improvement and guidance for decision-making purposes.

To satisfy the reporting, dashboard and access to data needs of admission and records personnel across the system, a Business Intelligence package has been implemented as part of the OpenCCCApply system. This will become the primary Business Intelligence tool for all future systemwide applications.

End of Fiscal Year 2015-16 Status

Accomplishments:

- 105 Colleges have implemented federated identity.

- RFP released and contract awarded for centralized and expanded Cloud deployment for Online Education Initiative, Common Assessment Initiative and Education Planning Initiative.

- Systemwide portal with portlets and connected web applications deployed as part of the Education Planning Initiative.

- California Community Colleges Report Center (Business Intelligence) successfully upgraded to latest version and deployed across 105 colleges to support CCCApply.

LISTSERV SERVICES, WEB HOSTING, TECHNOLOGY SERVICES

LISTSERV for Statewide and Regional Organizations

The Technology Center provides LISTSERV® hosting for California Community Colleges regional and systemwide organizations. The Technology Center maintains and supports more than 320 email distribution lists with approximately 96,000 subscribers and an average of 300,000 broadcasts per month. The Technology Center also provides support and training for all list owners.

Website Hosting

The Technology Center develops, hosts, and manages several systemwide websites including:

- TechEDge, the California Community Colleges systemwide technology newsletter

- California Virtual Campus

- California Community Colleges Education Planning Initiative

- California Community Colleges Common Assessment Initiative

- California Community Colleges Information Security Center

- California Community Colleges Accessibility Center

- ccchelp.info — Community Based Support for Students

- ccctechnology.info — Community Based Support for Staff and Faculty

The ccctechcenter.org domain includes the Technology Center site as well as multiple project management sites for systemwide projects.

The Technology Center also handles the registration, hosting and Domain Name System (DNS) for more than 75 additional domains.

All technical support for hosted sites related to the server is provided by the Technology Center.

Technical Evaluations

The Technology Center conducts technical research on information technology matters directly related to the California Community Colleges and its infrastructure expansion projects. Research includes technical evaluation of the systemwide technology projects as directed by the Chancellor's Office, Telecommunications and Technology Advisory Committee, Statewide Architecture Committee and other project identities. Research and evaluation is used to identify and analyze issues that may affect the statewide network infrastructure expansion project, to guide or support policy matters and to direct new information technology projects.

Emerging Technologies Research and Analysis

The Technology Center conducts an ongoing environmental scan to determine technology trends and identify emerging technologies that will impact or influence achievement of systemwide goals. This scan of the technical and educational environment is implemented through use of technology consulting groups and participation in appropriate conferences and organizations. Research and trend information is used to affect the direction of technology within the California Community Colleges.

LIBRARY AUTOMATION AND ELECTRONIC INFORMATION RESOURCES

In prior years, the Telecommunications and Technology Infrastructure Program provided the California Community Colleges with financial assistance through the program's allocation process. In 2009-10, the library community suffered severe cutbacks when program allocations to libraries were eliminated.

In an effort to support the libraries, the Telecommunications and Technology Infrastructure Program offered a leadership grant to help sustain the community while library leadership developed a new approach to supplying content. The library leadership grant team proposed the central purchase and statewide adoption of a library content database. The team estimated a cost savings of 50 percent if the content database was purchased and adopted centrally versus at the individual college level.

The Telecommunications and Technology Infrastructure Program recognized the importance of library content to community college accreditation and opted to make budgetary cutbacks in other areas of the program to ensure a level of funding for libraries.

The library leadership grant team issued a Request for Proposal and in early 2012, selected a statewide community college library content provider. By moving to a centralized contract, the system collectively has saved more than $3 million. The Telecommunications and Technology Infrastructure Program continues to support the libraries through this agreement.

End of Fiscal Year 2015-16 Status

Telecommunications and Technology Infrastructure Program funds activities of the Council of Chief Librarians that serve the libraries across the state. By moving to a centralized contract for Electronic Library Information Resources, the system collectively has saved more than $3 million.

The Council of Chief Librarians and California Community Colleges Technology Center currently manage the contract for Electronic Library Information Resources, which runs through fiscal year 2016-17.

TECHNOLOGY COMMUNICATIONS

TechEDge

CCC TechEDge, the California Community Colleges technology newsletter, provides current information about statewide technology efforts and the people bringing innovative technology to the California Community Colleges. Its audience includes distance educators, information systems officers, business leaders, the California Legislature and the entire community college technology community.

The CCC TechEDge website is updated on an ongoing basis with stories and announcements focused on technology in the colleges. Links to TechEDge stories, announcements and news from affiliates are posted as status updates to the CCC TechEDge Facebook page and tweeted via Twitter.

An email update, including references to each new story since the last update, is sent once a month to the TechEDge News mailing list.

Currently, TechEDge News has more than 3000 readers (**http://www.ccctechedge.org**).

In 2014, the California Community Colleges Technology for Student Success News was launched as a supplementary newsletter with a specific focus on supporting three major California Community College initiatives: the Online Education Initiative, Education Planning Initiative and Common Assessment Initiative.

Student Success News is published monthly. Because Student Success News includes faculty and other staff not included in the TechEDge audience, significant effort is placed on expanding the reach of this supplementary newsletter.

Currently, the California Community Colleges Technology for Student Success News has more than 22,000 readers.

GOVERNANCE

Telecommunications and Technology Advisory Committee

The Telecommunications and Technology Advisory Committee advises the California Community Colleges Chancellor's Office on the continued development and deployment of telecommunications and educational technologies in the California Community Colleges. The committee researches technology trends and recommends the direction for technology infrastructure initiatives within the system. The Technology Center supports the committee by coordinating its quarterly meetings and its annual Strategic Planning retreat.

Systemwide Architecture Committee Research and Trend Analysis

The Systemwide Architecture Committee provides technical expertise for planning the development

and growth of the systemwide information-technology infrastructure for California Community Colleges. The Systemwide Architecture Committee is a subcommittee of the Telecommunications and Technology Advisory Committee. The Systemwide Architecture Committee works in coordination with the Telecommunications and Technology Advisory Committee to develop strategic plans, policies, implementation strategies, practices and standards regarding the systemwide implementation of IT infrastructure.

There is a need for the Education Planning, Common Assessment and Online Education grant initiatives to coordinate technology and have a governance body for technology. The Systemwide Architecture Committee has agreed to serve as the primary for the Technology Advisory Committee to these initiatives. To this end, they have begun to review related technology offerings and have provided feedback on environmental scans to the colleges.

TELECOMMUNICATIONS AND TECHNOLOGY INFRASTRUCTURE PROGRAM SOUTH — 3C MEDIA SOLUTIONS

THE EVOLUTION OF 3C MEDIA SOLUTIONS

3C Media Solutions, www.3CMediaSolutions.org, began in 1999 as CCCSAT, a satellite system for broadcasting distance education, instructional and professional development programs to the California community colleges. The unit was renamed 3C Media Solutions in 2007 to reflect an expanded vision of multimedia services and support for the California Community Colleges, including digital storage and on-demand video streaming. 3C Media Solutions along with CCC Confer and @ONE Training are supported through a $3.9 million grant to Palomar Community College District.

3C Media Solutions Services:

- **Video on Demand** — Upload and share educational materials free of advertisements

- **3C Streaming Media Stream live events locally or systemwide**

- **Video Conferencing** — Offering services for campuses with h.323 room systems

- **Production** — Capture, edit, caption and index

- **Conference Support** — Capture, edit and distributed for virtual viewing

- **3C RSS (Podcasts) for Educators** — Broadcast your information by creating RSS feeds

Access to Educational Content — Video on Demand

3C Media Solutions maintains a video on demand repository and YouTube like sharing website, where content from any college or organization in the system – regardless of length – can be uploaded and shared with anyone, anywhere. The video-on-demand service allows faculty and staff to link any digital media to their Learning Management System or website of choice to stream directly to the student. This single port-of-entry saves users the need to search in multiple places to find desired content or videos.

3C Media Solutions currently stores more than 50,000 instructional videos for use by students. To date, there have been more than 3.5 million views. In addition, this service also provides unlimited file storage for all faculty and staff in the California Community Colleges.

3C Media specializes in providing services to the educational community; as a result, colleges receive the benefits of private sector services without the limitations, costs and advertising that are common when purchasing technology commodities.

Conference Presentations

Lectures

Video Conferencing

3C Media Solutions offers more video conferencing options for campuses or office desktop and laptop computers, mobile devices and telephones. 3C Media Solutions currently supports 56 colleges, and more and more colleges are taking advantage of room connectors, which allows video conferencing services to connect easily to online meeting and conferencing systems.

Event Coverage / Video Production

3C Media Solutions provides multimedia conference support for organizations wishing to make conference presentations and events available to members unable to attend face-to-face or to those who wish to review past events. This can include presentation, symposium, conference keynote speaker, workshop, breakout sessions, board meetings and special events. Conference sessions are captured in high quality, edited, captioned, and if desired, made available as live web streaming events, often with opportunities for interaction with the presenters. To support these events, 3C Media Solutions provides all video production services, including video creation, editing and distribution.

3C Media Solutions has supported the Board of Governors to fulfill the California requirement for transparency by recording and webcasting the Board of Governors meetings in Sacramento and on location at the various colleges where they sometimes meet. The meetings are webcast live with captions and archived for immediate viewing following the meeting.

Examples of 3C Media Solutions Conference Support:

- Audit & Fiscal Compliance

- Basic Skills & Student Outcomes Transformation Program

- Committee on Awards for Innovation in Higher Education

- Career Technical Education Data Unlocked Training

- California Career Technical Education

- EEO & Equity in Faculty Hiring training California Community Colleges Real Estate Center

- California Distance Learning Health Network

- CISOA — Chief Information Systems Officers Association

- Enrollment Management Workshop

- eTranscript California

- How to Submit a NEW Noncredit Course Proposal

- Inmate Education Training Workshop

- Integrated Planning Convening

- Integrated Planning: Adapting Best Practices for your College

- Online Teaching Conference

- Partnership Resource Team Workshops 2016

- Professional Learning Network Webinars

- The Research and Planning Group

- SCUP — Society for College and University Planning Conference 2016

- Student Equity Conference

- Student Support (Re)defined SSR(d)

ONLINE EDUCATION

Streaming media has enabled distance education to become more interactive and accessible than was previously possible. Faculty have access to a wider variety of educational tools and students are now able to take online courses at a time and place suitable for them as long as there is an internet connection.

The availability of streaming media services enables faculty to:

- Include digital educational materials in their online courses.

- Create, store and stream digital content

- Seamlessly link content to any learning management system such as Blackboard and Moodle.

- Enhance the explanation of concepts through downloadable handouts and video clips, and receive student feedbacks through mediums like live chats and emails.

STREAMING MEDIA SERVICES

3C Media Streaming is one of the many services provided by 3C Media Solutions to faculty and staff of the California Community Colleges, where videos are streamed for use on many computers and mobile devices. Faculty and staff may stream instructional, informational or orientation videos using 3C Media Streaming services to enrich the online learning experience of students and staff.

3C MEDIA SOLUTIONS EVENT STREAMING

Dedicated live streaming channels are available 24x7 to member institutions to stream their live events. 3C Media has provided live webcasting for events such as the Online Teachers Conference and the California Community Colleges Board of Governors meetings. Additional community college live streaming events include:

- College programing and announcements.

- Monthly college board meetings.

- Live class sessions.

- Live online tutoring sessions.

- Sporting events.

- College president's welcome speech for faculty.

3C MEDIA SOLUTIONS / ONLINE EDUCATION INITIATIVE PARTNERSHIP

3C Media Solutions has partnered with the Online Education Initiative and created an integration of a video hosting and captioning service into the Canvas Learning Management System, which will be used by the California Community Colleges to provide online learning courses for all students. Using a Learning Tools Interoperability integration, instructors will be able to easily share their video content in Canvas for the benefit of their students. Instructional videos will also be captioned using a streamlined process developed for the Distance Education Captioning and Transcription captioning grant.

3C Media Solutions Usage	July 1, 2014 June 30, 2015	July 1, 2015 June 30, 2016
VOD Total Videos	26,898	41,468
VOD Total Views	2,241,328	2,564,439
Live Events Viewers	2833	4214
Number of Colleges Using 3C Video Conferencing Services	44	85
Video Conferencing Meetings	908	897
Video Conferencing Connectors	97	97
Web Streaming Accounts	31	39
Live Events Streamed	83	60

SYSTEMWIDE E-CONFERENCING, CCC CONFER

CCC Confer provides no cost, systemwide audio and electronic internet-based conferencing services to all college staff and faculty. The $3.5 million e-Conferencing grant awarded to Palomar College in 2001 funded the development of a comprehensive, coordinated e-conferencing tool to complement the decentralized infrastructure of the California Community Colleges. Initially supporting meetings, the success of CCC Confer eventually prompted a separate grant to encourage and expand the use of e-conferencing technologies in the classroom. CCC Confer along with 3C Media Solutions and @ONE Training are supported through a $3.9 million grant to Palomar Community College District.

CCC Confer provides the opportunity to present online:

- Classes

- Office hours

- Counseling

- Tutoring

- Administrative and organizational meetings

- Systemwide presentations

- Employee trainings

Online rooms offer a wide variety of features, available anytime you connect to a room.
Some of the most popular features include:

- A toll-free number, or cell phone number, and passcodes providing access control for connecting to the telephone conference line and online room.

- Whiteboard Screens: Using a tool set you can write on a blank screen, point and highlight content on PowerPoint slides and images to keep participants focused on screen. Connect adjunct tablets for easier writing, which appears on the Whiteboard screen.

- Application Sharing: Share content to teach or collaborate using any desktop program including Word, Excel, PDF, course management systems and websites. Work on the applications in real-time; pass control to participants to work on your programs.

- Web Tours: Participants view your navigation of websites.

- Text Chat: Everyone can send public and private chat messages as an additional or alternate means of communication.

- Record: Include content, conversation, and text chat in a recording for sharing, posting to your own website or learning management system, and upload into your 3CMedia Solutions account.

- Accessible: Meets standards for deaf or hard of hearing, and blind or low vision individuals.

EXAMPLES OF CCC CONFER CONFERENCING SUPPORT

MSJC Academy Presentation	Berkeley City College Training	4CSD Conference Reboot 2015
Los Medanos College Professional Development Day	Lassen College	Long Beach City College
Grossmont Professional Development Day	3CBG/CISOA Conference	Classified Leadership Conference
State Center Community College District	OEI Town Hall Meetings	Pierce College Training
Long Beach City College Counselors	CMC3 South Conference	CCPRO Annual Conference
Butte Flex Day	Grossmont College Training	CCCCO Academic Affairs Division
El Camino College	Palomar College Professional Development Workshop	San Diego Continuing Education
Clovis Community College Center	On Course National Conference	Lassen College
3C Webinar	Sacramento City College LSTC Tutoring	Antelope Valley College
IEPI Conference	Berkeley City College	Palomar College Tutoring Committee
OEI Camino College Training	Santa Rosa Jr. College Tech Fair	Online Teaching Conference 2015 and 2016
Foothill College's Tech Conference	Foothill Tech Conference	CCC Pro Conference
CCLC Presentation	3MC3 South Conference	CCC Trustee Retreat
CMC3 Conference	CBEA Conference	DE Coordinators Meeting
MPICT Conference	Community College League	ASCCC Conference
4CS Leadership Conference	Cerritos College Online Counseling	Student Success Conference

E-CONFERENCING IMPACTS ON THE CALIFORNIA COMMUNITY COLLEGES

Providing the California Community Colleges with an e-conferencing system produces an estimated cost savings by reducing travel-related expenses, but more importantly, more community college faculty, students, staff and administrators are connected to one another and to the broader educational community.

E-conferencing strives to eliminate barriers to participation and learning.

The following chart shows the number of people (students, faculty, staff and administrators) in 2014-15 and 2015-16 able to participate in no-cost virtual classes, meetings and informational sessions. Without the option of virtual attendance, many participants would have been excluded due to cost and distance factors.

CCC Confer Usage	July 1, 2014 June 30, 2015	July 1, 2015 June 30, 2016
Total Meetings	64,707	66,297
Total Participants	367,506	383,067
Training Participants	9593	9642

The benefits of this technology include:

- Minimized travel expense, since meetings and classes are conducted over the internet.

- Time savings, since participants do not have to go anywhere, set up any rooms or equipment.

- Training and professional development can be extended from small groups and locations to large groups in several locations, and recorded for future dissemination.

- Timely and efficient personal contact between instructors and students, administrators and constituents, organizational leaders and members.

- Removal of geographical limitations to the information flow of large organizations, ensuring that all individuals are on the same page and able to strategize, act and react faster than ever before.

SYSTEMWIDE TECHNOLOGY TRAINING FOR FACULTY AND STAFF (@ONE)

With an effort to enhance instruction through technology, the @ONE project offers free and/or low-cost training for the faculty and staff of the California Community Colleges, thereby providing them with a substantial cost savings for high quality professional development. Instructors provide face-to-face training, online and self-paced courses, webinars, accessible archives and downloadable materials. @ONE (**http://www.onefortraining.org/**) provides training and technology resources in partnership with Mt. San Jacinto College.

PROFESSIONAL DEVELOPMENT SERVICES

Online Teaching Certification Program

In response to high demand, @ONE offers an Online Teaching Certification Program helps online instructors excel in the digital age. It is extremely affordable and comprehensive. The program has been designed instructional needs in mind, and faculty receive usable tips every step of the way from experienced instructors in online education. The program offers the skills and knowledge to acquire effective course design skills, increase student success and retention rates, better use existing course management tools and learn to leverage new media to inspire students to succeed.

Online Courses

Provide training delivered in a virtual setting to participants over the Internet ranging from an Introduction to Online Teaching and Learning to Creating Accessible Online Courses. Online courses last four to twelve weeks and are facilitated by expert colleagues. In addition to a facilitator, a cohort of faculty colleagues will join students.

Desktop Webinars

Virtual seminars that explore a variety of educational technology topics and practices such as:

- Computer Basic & Advanced Tools

- New Software Applications

- Educational Technology

- Information Technology

- Collaboration Tools

- Industry Updates

- Hot Topics

- Best Practices in Online Education

Trainer's Bureau

Customized face-to-face and virtual training offered at a college or venue and delivered to a large group of faculty or staff by @ONE approved trainers. The Trainer's Bureau houses a large and growing number of skilled trainers across the state of California who have already worked with @ONE or have been approved by @ONE. These trainers can use standard @ONE curriculum for events or depending on a college or organization's specific needs, use customized curriculum, as well as provide online training.

Online Teaching Conference

@ONE provides co-sponsorship and support for the Online Teaching Conference. With more than 1,000 attendees and 70 breakout sessions, the Online Teaching Conference is an inter-segmental conference focused on curriculum, pedagogy and technology to improve online instruction and learning.

@ONE Partnership with OEI — Online Education Initiative

With increased participation across the all of @ONE's professional development services, it is evident that there is a growing interest in systemwide technology training. With statewide interest in online education and its ability to further support the success and attainment of educational goals of our students, @ONE is looking to meet the increasing demand of providing training to develop quality online educators. There is demand for training in specific technologies (screen recording) and instructional delivery practices (video-based content production). @ONE, through a partnership with the California Community Colleges Online Education Initiative, also provides:

- Training for online educators

- Assistance with the review of more than 120 online course designs for quality assurance

- Creation of an Intro to Teaching with Canvas course

- Regional Canvas Intro workshops for Pilot schools

- Creation of a course on Online Education Standards & Practices (OESP)

Demand for Training Services

Requests for training from California community college faculty and staff led @ONE to realize that the demand for training was as great as it always has been. It should also be noted that the numbers reported in the tables represent participants taught by @ONE facilitators.

@ONE also provides its curriculum to colleges and districts at no charge so that colleges can train faculty and staff locally. The availability of reusable @ONE curricula saves the colleges and districts money needed to develop training curriculum as well as ensure that they are getting a quality instructional experience. @ONE's use of the Creative Commons for its materials is a significant systemwide benefit. Creative Commons is a non-profit organization that enables the legal sharing and usage of creative works, such as curriculum.

The online courses and certification program showed considerable growth that reflected the demand for quality online instruction. Likewise, the Online Teaching Conference provides a unique development opportunity for experienced online instructor to share their expertise and learn from other experienced instructors. The conference is the only development activity for experienced instructors to network and learn. Most of the other activities are aimed at new or recent online instructors.

The demand for @ONE services is greater than it has ever been, due to the prevalence of technology in all aspects of teaching. Further, with the emphasis of accreditation on student learning outcomes and a greater scrutiny on online course quality, the certification program is providing a mission-critical service that individual colleges cannot deliver.

@ONE Professional Development Services Usage	July 1, 2014 June 30, 2015	July 1, 2015 June 30, 2016
Total Online Courses	28	40
Total Online Course Participants	736	1,027
Certification Programs	11	5
Certification Program Certificates	341	120
Desktop Webinars	20	18
Desktop Webinar Participants	1,068	1,217
Self-Paced Training	37	19
Self-Paced Training Participants	227	2,114
Trainers Bureau Trainings	17	14
Trainers Bureau Trainings Participants	528	393

PROFESSIONAL LEARNING NETWORK

TTIP South manages and provides technical support for the Professional Learning Network. This includes hosting and development of the Professional Learning Network website, infrastructure development and maintenance of all professional development course platforms, tracking of all activities and participants in professional development activities, and provision of web conferencing services to faculty and students within the Institutional Effectiveness Partnership Initiative structure. Additionally new features for the Professional Learning Network website will continue to be developed to maximize the proliferation of online teaching and learning effective practices.

@ONE also supports the Professional Learning Network by providing for the development and dissemination of effective professional, administrative and educational practices and programs across the system as well as the development of applied solution kits that colleges can use to promote sound college and district operations. Some of the programs that have been identified include the California Conservation Corp, Incarcerated and formerly Incarcerated Adults, Data Disaggregation, and Integrated Planning.

The Professional Learning Network has been a highly collaborative project several years in the making. In 2011, the California Community Colleges Board of Governors formed the Student Success Task Force, which released a comprehensive report containing 22 recommendations designed to foster greater student success. A key recommendation from the committee was for the Chancellor's Office to create a "virtual professional development resource center"—a "one-stop shop" for colleges and their employees to access effective practices, trainings, and other resources. This virtual resource center is what we now know as the Professional Learning Network.

To solicit input on what the Professional Learning Network would include, in 2014, the Chancellor's Office — in collaboration with the **Academic Senate for California Community Colleges, California Community Colleges Success Network (3CSN), California Community College Council for Staff and Organizational Development (4C/SD), @ONE, Online Education Initiative and Success Center for California Community Colleges** — held six regional summits on the project and had 500+ participants who came up with a number of desired features for the portal, including:

- A highly searchable listing of effective practices for the system.

- A library of self-paced video-based trainings.

- A discussion board that allows personnel to communicate across colleges and program areas.

- A "speakers bureau" (a listing of experts who are available to speak at conferences).

- A systemwide events calendar.

Summit participants suggested many topics and issues to include in the portal, such as:

- Evidence-based practices on basic skills education, career technical education, and other programs.

- Topics related to accreditation (including student learning outcomes and integrated planning).

- New employee orientation and training.

- How to create robust professional development programs on campus.

The 2014-15 state budget package created a new California Community Colleges program known as the Institutional Effectiveness Partnership Initiative, led by the Chancellor's Office, to help colleges improve student success rates and address accreditation, fiscal, and other issues. The Institutional Effectiveness Partnership Initiative also provided extensive guidance and feedback on development of the Professional Learning Network, which is intended to supplement the many in-person workshops and other system events held throughout the year. The 2015-16 Budget Act provides ongoing funding for the Professional Learning Network as part of the Institutional Effectiveness Partnership Initiative.

The Professional Learning Network officially launched in April 2016 with a goal of reaching 5,000 users within the first year; in the first few months, 4,200 members have already joined with participation from all 113 California community college campuses. Trainings from Lynda.com, to be joined later in 2016 by Skillsoft, are also part of the Professional Learning Network. To date, there have been 60,000+ video views and more than 800 certificates of completion awarded to members.

CAL-PASS PLUS — CALIFORNIA PARTNERSHIP FOR THE ACHIEVEMENT OF STUDENT SUCCESS

HISTORY

The California Partnership for the Achievement of Student Success (Cal-PASS) is supported through a $1,139,000 grant currently held by the San Joaquin Delta Community College District. The project began in 1998 to enable the collection, analysis and sharing of student data in order to track performance and improve success from elementary school through community college and university.

In 2011-12, the grant was rebid and awarded through the competitive grant process to the San Joaquin Delta Community College District, at which time the project's name was changed to reflect expanded K-12 and workforce partnerships. The project is now called to as Cal-PASS Plus (CPP). Fiscal year 2016-17 marks the fifth year of the Cal-PASS Plus grant at San Joaquin Delta Community College District.

Cal-PASS Plus provides a critical service to the California educational system since California lacks a single repository for student data. Since the project has come under the administration of San Joaquin Delta College, it has included more technologically advanced online dashboards offering user reporting features, publicly available aggregate data, as well as password-protected members' only specific institutional, local and regional data. The system has also been integrated into additional statewide projects as a critical source of intersegmental and outcomes data including the Strong Workforce Initiative (through the Career Technical Education LaunchBoard), California Career Pathways Trust, the Common Assessment Initiative and the Multiple Measures Assessment Project for student placement into college courses.

Cal-PASS Plus ongoing services include:

- Dashboards that develop and provide reporting options for an expanded view of students and their progress using the Education to Workforce Pipeline as well as identifying specific programmatic needs and identifiers such as career technical education.

- Connecting K-12, community college, university, business and community stakeholders using a large-scale student level system of data and a consortium model of Regional Learning Collaborative that focus on inter-segmental issues and momentum points for students.

- Analyzing pre-K-16 student performance data through systematic research projects, data reviews, and interactive analysis tools provided to users and developed based on user-identified needs. These data tools and analyses increasingly focus users towards higher performing systems for benchmarking and connecting to peers to learn what works for student success.

The system and initiatives are managed through a partnership among the following leaders and organizations: San Joaquin Delta College, a 501(c)(3) non-profit, and the El Dorado County Office of Education.

MOU and Data Collection

The goals and objectives have been revised throughout the years to reflect the needs of Cal-PASS Plus users but with primary focus being on increasing membership and data collection in order to improve the functionality of Cal-PASS Plus' actionable data reporting tools.

Data are shared between partner institutions based upon pre-defined rules and data sharing agreements.

In the past, Cal-PASS Plus measured success by the number of memorandums of understanding s it collected but with more than a thousand school districts in the state, many of which are small single-school districts, the team shifted its focus from trying to increase the number of MOUs to pursuing agreements with institutions that have large student populations. Because of these efforts, 41 percent of California K-12 school districts (comprising 81 percent of statewide students) are now Cal-PASS Plus members as of the end of the 2015-16 fiscal year.

There is currently 100 percent participation from the community college system but participation from the CSU and UC system is low because many of their individual campus memorandums of understanding recently expired. In 2014-15 the Cal-PASS Plus team made it a priority to reach out to partners at UC and CSU institutions to re-establish those memorandums of understanding resulting in 35 percent of CSU and 22 percent of UC campuses participating in Cal-PASS Plus.

Data submission, outside of the community college system, continues to be a challenge in obtaining a complete system of data but it is improving. An average of 60 percent of our K-12 partners have submitted data going back to the 2011-2012 school year. With a majority of students now captured in the memorandums of understanding, Cal-PASS Plus will use data submissions as the new benchmark.

Snapshot of Cal-PASS Plus Achievements

- Renewed 428 of expiring historical memorandums of understanding (2014-15).

- Increased the number of participating institutions that openly share their data with all other Cal-PASS Plus members to 100 percent (2014-15).

Regional Learning Collaboratives

Cal-PASS Plus currently supports 20 active Regional Learning Collaboratives in the state with actionable data that will help foster collaboration, communication and alignment that focuses on problem solving for student success.

There are also 64 California community colleges participating in the Multiple Measures Assessment Project that Cal-PASS Plus supports. Through that participation, colleges are working with their K-12 districts to collected high school transcript data and use that to improve college course placement.

Snapshot of Cal-PASS Plus Achievements

- Established a complete regional data set for Kern County to enable tracking of transition points and to inform multiple measures of placement. (2014-15)

- Supported 12 regional college and university partnerships across the state focused on Foster Youth postsecondary success with data dashboards, professional development and custom cohort tracking tools (2014-15).

- Butte County Office of Education and Butte College officially began the process of designing a "Butte College Promise Initiative" that creates clear pathways for students to complete postsecondary education and achieve living wage careers. Cal-PASS Plus provides data and support in planning. In October, all segment leaders in the region hosted a three county event called Forecasting our Future to launch this College Promise initiative (2015-16).

- El Dorado County Consortium, comprised of all 16 school districts within the county, opened up career technical education experiences to middle school students. The consortium uses Cal-PASS Plus data to increase the number of student that pursue a career pathway in local industry sectors (2015-16).

- Increased Regional Learning Collaboratives from 15 to 20 (2015-16).

Professional Development

Cal-Pass Plus members had opportunities to learn how to get the most out of the Cal-Pass Plus' website tools through a variety of trainings provided by outreach staff. These included more than 100 webinars, small group trainings and conference presentations/trainings.

Snapshot of Cal-Pass Plus Achievements

- Held quarterly webinars for Cal-PASS Plus users focused on data tools and best practices for K-12, community college, and university leaders (2014-15 and 2015-16).

- A demonstration of Cal-PASS Plus's Student Athletes Dashboard was done for more than 200 people at the California Community College Athletic Director's Association 42nd Spring Meeting (2015-16).

- A demonstration of Cal-PASS Plus's University Transition Report was presented at the University of California's P20 Regional Intersegmental pre-conference meeting. Twenty diversity and outreach leaders from throughout the UC system attended the meeting (2015-16).

Website Development & Innovations with Data Displays

Transition reports and other tools are constantly updated to be more detailed and user friendly and are based on feedback the Cal-PASS Plus user feedback. Cal-PASS Plus users are updated about new tools and resources available to them through a variety of platforms: newsletters, targeted emails, webinars and person-to-person contact.

Snapshot of Cal-Pass Plus Achievements

- Creation of members list page developed from specific feedback from users requesting frequent updates on the status of data uploads, membership with memorandums of understanding and regional search functionality. (2014-15)

- Created new K-12 to community college, K-12 to university, and community college to university transition reports highlighting college going patterns, remediation, and completion, including disaggregation by ethnicity, gender and programs of study. (2014-15)

- The Career Technical Education (CTE) LaunchBoard, hosted by Cal-PASS Plus, was expanded to address directly the needs of users focusing on individual career technical education programs, regional consortia and awardees under the California Career Pathways Trust grants. The LaunchBoard and California Career Pathways Trust tab allows consortia to upload and track their specific metric data and gather information for grant reporting needs (2014-15).

- Strong Workforce Tool – reports on equity gaps=disproportionate gender and racial differences in the K-job pipeline published on LaunchBoard site (2015-2016).

- Created a new data import process to address statewide reporting issues in synchronization of years and grades in CALPADS (2015-16).

- All K-12 assessment data from the Smarter Balanced assessment have been loaded into the K-12 data portraits on the website (2014-15 and 2015-16).

- Usage of the Cal-PASS Plus system continues to increase with 700 new accounts created (2015-16).

Research, Reporting and Communication

As Cal-PASS Plus continues to support educational institutions, Regional Learning Collaboratives and consortia members with data and system tools, they are recording, analyzing and reporting on the methods that lead to student success.

Snapshot of Cal-PASS Plus Achievements

- Best Practice Toolkit for K-12s on closing the achievement gap was developed using data and independent research and published on website (2014-15).

- Best Practice Framework was developed for K-12 and community college transitions and published to the website (2015-16).

- Bright Spots video vignettes focused on successful examples of intersegmental collaboration and the use of Cal-PASS Plus data. (2015-16)

- A systemwide survey was conducted, in conjunction with the Multiple Measures Assessment Project, of the 60 colleges participating in the project. Feedback from the survey included what worked and what challenges users had with accessing matched data through Cal-PASS Plus (2015-16).

Integrated Projects

The Cal-PASS Plus team continues to find ways to integrate with other Chancellor's Office projects clearly identifying where data are related, accessible in multiple formats and available to multiple levels of users.

Career Technical Education LaunchBoard

The LaunchBoard provides data to California Community Colleges and its K-12 school districts on the effectiveness of career technical education programs. This information is intended to facilitate local, regional and statewide conversations about how to improve student transitions from K-12 to college and on to the workforce.

- A robust set of program level data tools was launched to support improvement of career technical education programs and pathways within California community colleges including educational milestones, supply and demand, employment outcomes and wage gains.

- A statewide, multi-partner professional development series reaching 700 community college and K-12 leaders in career technical education was executed focused on how to use actionable data in the CTE LaunchBoard to improve student outcomes.

MMAP/CAI

The Multiple Measures Assessment Project has provided users with specific Cal-PASS Plus inter-segmental data for longitudinal analysis of high school data for students within the 64 participating community colleges. This analysis is to assist community colleges with determining a multiple

measures approach to placing students that will increase the number of transfer level placements and reduce the number of students in remedial courses.

- Increased participating colleges to 64.

- Phase II of the project was completed which provided pilot colleges with student metrics from K-12 schools including course taking patterns, grades and cumulative GPAs for use with the Multiple Measures decision tree model for placement in courses (2015-16).

- More than 100 workshops, presentations and webinars were provided to California community colleges to help them launch effective efforts to use multiple measures (2014-15 and 2015-16).

- Outreach was conducted to hundreds of K-12 school districts that feed into Multiple Measures and Common Assessment Initiative participating colleges to increase access to high school transcript data to inform placement of students (2014-15 and 2015-16).

Goals for next year (2016-17)

Providing a big-picture analysis for the user community remains an ongoing goal for the project. The Cal-PASS Plus team is focused on completing the following goals in the 2016-17 year.

- Cal-PASS Plus is pursuing a direct data sharing partnership with UC Office of the President to make it easier for UC campuses to participate.

- Improve transition reports.

- Publish an adult education dashboard tab in the LaunchBoard.

- Increase K-12 memorandums of understand and data submission by 10 percent from 2015-16 levels.

Connect with us!

WEBSITES

California Community Colleges
CaliforniaCommunityColleges.cccco.edu

Student Success Scorecard
scorecard.cccco.edu

Salary Surfer
salarysurfer.cccco.edu

Associate Degree for Transfer
adegreewithaguarantee.com

Priority Registration
stepforward.cccco.edu

Workforce & Economic Development
doingwhatmatters.cccco.edu

Financial Aid
icanaffordcollege.com

SOCIAL MEDIA

f **California Community Colleges Facebook Page**
facebook.com/CACommColleges

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California Community Colleges Twitter Feed
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Chancellor Eloy Oakley Twitter Feed
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