



2017 REPORT

Distance Education Report

California Community Colleges Chancellor's Office | Eloy Ortiz Oakley, Chancellor

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DISTANCE EDUCATION REPORT

EXECUTIVE SUMMARY

In this eighth edition of the Distance Education Report, 10-year trends (2006 to 2016) show positive gains for California community college students.

Increasing numbers of distance education course sessions, coupled with increasing numbers of students taking these courses, have led to subsequent increases in full-time equivalent students (FTES). Currently, nearly one in three students takes a distance education course in an academic year.

The number of students taking distance education courses has been steadily increasing over the last 10 years. Distance education completion rates have also steadily climbed. The gap in success rates between traditional face-to-face (71 percent) and distance education courses (66 percent) has closed from 17 percent 10 years ago to 4 percent in 2016-17.

Over the past five years, students under 18 years old have had higher success rates than all other age groups (70-78 percent). All age groups have shown an increase in success rates in the last 10 years.

In 2016-17, the average distance education student was female, 20-24 years old and Hispanic.

In 2016-17, the composition of distance education students:

- Sixty percent were women. Women continue to represent a significant majority of the students in distance education.
- Seventy-two percent were between the ages of 18 to 29 years old. Twenty-five percent were in their 30s to over 50. The under 18-year-olds represented three percent.
- Thirty-nine percent were Hispanic. They outnumbered whites for the first time in 2014-15 and have since become the largest ethnic group in distance education.

From 2014 to 2016, 48 colleges reported there were 576 completely online distance education programs. These included 289 associate degree programs, 39 associate

degrees for transfer and 226 certificates (13 were blank or unknown). The top five most common subjects included business, information technology, social sciences and liberal arts.

Student Accessibility to Instruction

Two valuable resources available to assist the California Community Colleges with accessibility compliance are the High Tech Center Training Unit and the Distance Education Captioning and Transcription (DECT) services. The High Tech Center Training Unit provides colleges training and support for accessible web and print documents for students with disabilities. DECT continues to provide colleges with live captioning and transcription support.

Looking Ahead

The most recent Instructional Technology Council (ITC) national eLearning survey results for trends among community colleges indicates a growth of less than one percent in distance education. Unlike the rest of the nation, distance education in the California Community Colleges system continues to grow. As students become more comfortable with — and more successful at — distance education courses, California community colleges continue to expand and improve their offerings. Faculty members are creating and converting courses to meet the growing demand. More colleges are integrating student support services to boost distance education student success. Distance education is an effective instructional delivery method that will help fulfill the goals of the Strategic Vision for the California community colleges. Namely:

- Increasing student attainment of associate degrees, certificates or job-related credentials by 20 percent through the flexibility of asynchronous learning. Setting targets for expanding the Online Course Exchange.
- Increasing transfer by 35 percent through seamless enrollment and sharing of student information in the Online Course Exchange.
- Decrease the average number of units accumulated (to the goal of 79 units) through improving distance education retention and success.
- Increasing the percent of Career Education (CE) students working in their field of study to 69 percent through increasing the number of CE courses and certificates available online.

- Reducing regional and equity gaps to zero within 10 years through improved preparation for students taking distance education, better trained faculty and improved design of distance education courses. Targeted efforts will be directed towards increasing the overall success rates to exceed 70 percent and to closing the equity gap by focusing on improvement in success rates of African-American and Hispanic students taking distance courses and programs.

The Chancellor's Office, the Distance Education and Education Technology Advisory Committee, the Online Education Initiative and other stakeholders will assist the colleges in fostering the growth and success of their programs.

Upcoming areas of focus include: 1) State Authorization, 2) Statutory, Regulatory and Policy Guidance Updates, 3) Guided pathways in distance education and 4) the establishment of a fully Online College.

State Authorization

When colleges seek to serve students out-of-state, state laws and federal regulations require colleges to obtain approval from that state. To ease the burden of obtaining individual approvals, states may sign on to a regional State Authorization Reciprocity Agreement. To date, California has elected to not formally join an agreement, largely due to questions and concerns that have been expressed by student and consumer advocates regarding the extent to which an agreement provides and allows for adequate oversight of proprietary institutions.

Statutory, Regulatory and Policy Guidance Updates

The Distance Education and Education Technology Advisory Committee has begun identifying statutory and regulatory barriers to distance education. The committee will prepare recommendations for improvement. A comprehensive regulatory change package is expected in 2018. Subsequent guidance documents will be issued along with training on implementation.

Guided Pathways

Through the guided pathways model, distance education will play a significant role. By assisting colleges in the marketing of existing distance education program guided pathways, students will find the courses and programs they need to achieve their academic and career goals. Effective use of the Online Course Exchange's

infrastructure and tools, including the strong online course rubric, will ensure students have focused learning outcomes and will stay on their higher education path.

Online College

With Governor Jerry Brown's support of the benefits of online education for students and colleges, he tasked the Chancellor's Office with establishing a new fully online community college. This new Online College will building on existing efforts that foster student success by increasing the availability of online courses and sub-award programs that make college more accessible and affordable. The new Online College will focus on under-served working adults not currently enrolled in California community colleges, who need skills and credentials to advance their careers. The new Online College is programmatically distinct from the Online Education Initiative (OEI) and is not designed to compete with existing colleges for students. In the coming year, concerted efforts will be devoted to this high priority project.

INTRODUCTION

Distance education focuses on the design of pedagogy, instructional design, and technology for students who are not physically present in the same location with the instructor. In an increasingly demanding culture where students balance multiple commitments of work, family and education, the challenge of the traditional face-to-face classroom delivery mode becomes a barrier to success. Distance education creates a convenient educational experience of equal qualitative value as an alternative to the face-to-face course. The California Community Colleges serves more than 2.1 million students and is the largest system of higher education in the nation. To address the educational needs of this diverse student body, the community colleges offer courses through distance education.

This is a report on distance education in the California Community Colleges. This is the eighth report to the Board of Governors per Standing Order 409 (b) “that evaluates the effectiveness of distance education and education technology system wide and provides analysis of data demographically (by age, disability, ethnicity, and gender) of student accessibility to instruction, and enrollment and completion rates.” This report also describes the current and historical landscape of distance education and discusses issues impacting distance education such as course development and support, state authorization, student authentication and academic integrity. These benchmarks provide details that help measure the potential impact on distance education in the California Community Colleges.

BACKGROUND

Distance education is “instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology”¹ (title 5, section 55200). Distance education has existed in the California’s Community Colleges for more than 40 years. In the early days, television was the primarily delivered method but courses were also delivered via radio and correspondence. Policies limited the types of courses that could be delivered via distance education. From 1979 to 1994, community college students were allowed only to take courses that were transferable to baccalaureate institutions. In 1994, new temporary regulations were adopted creating a seven-year pilot period for distance education courses. These policy changes were established to allow the community colleges to explore and develop educational initiatives related to distance education.

Since that time and using advanced communication and computing technologies, the California Community Colleges Chancellor’s Office and the campuses have addressed student access issues related to geographical, cultural, or facility barriers. Much has changed since the policy reform that allowed distance education to be conducted across the curriculum. In 1995-96 distance education course sessions represented only 0.63 percent of all course sessions; today they have grown to represent 14 percent of all course sessions.

¹ California Code of Regulations, title 5, section 55200

Courses, Sections and Sessions

All enrollment data for this report derive from the Chancellor's Office Management Information Systems. Colleges report enrollment data according to the criteria set forth in the Data Element Dictionary codes. For purposes of this report, a distinction is made between a course, course section, and course session. The Data Element Dictionary definitions are as follows:

A course is a unique offering by a college, which has a unique course outline that approved by a local college's curriculum committee (e.g., Bio. 1: Principles of Biology).

A course section is an individual course offering at the local college (e.g., Bio. 1–04, which would denote the fourth section of Bio. 1 offered in a particular term).

A course session represents a unique instructional occurrence within a course section. There are two types of course sessions identified in the Data Element Dictionary.

Type A is the standard type of course session.

Type C is a course session that is used to assign students from the primary course section to smaller class sizes (e.g., to schedule two or more laboratory course sessions for students in the same Bio. 1 lecture section, the college may offer two sections, Bio 1-04A and Bio 1-04B, to allow for smaller laboratory class sizes for students from the same biology lecture course).

In this report, a course session is roughly equivalent to a course section because a course session captures all student enrollments and presents a more precise count of course offerings.

In March 2002, the California Community Colleges Board of Governors approved title 5 regulations to permanently expand distance education to all credit and noncredit courses. The BOG also directed continuance of the review and collection of distance education data that began in 1994. These data, updated every two years, report student access and success in all distance education courses by the age, ethnicity, gender and type of disability of the students enrolled. The 2002, regulatory changes also established courses as equivalent to a regular course rather than as independent study for the purposes of computing full-time equivalent student (FTES) apportionment.

Regulations regarding the standards and criteria for distance education courses were revised in collaboration with the renamed Distance Education and Education

Technology Advisory Committee² and Chancellor's Office staff and were approved by the BOG in July 2007.³ In 2007, the regulations specifically addressed instructor contact and separate course approval. Regulations regarding distance education attendance accounting standards for labs and noncredit courses were also revised and approved by the BOG in June 2008.

In conjunction with the California Community Colleges' efforts to build a solid foundation for distance education, the Accrediting Commission for Community and Junior Colleges (ACCJC) Western Association of Schools and Colleges is responsible for assuring that colleges meet the requirements of the Higher Education Opportunity Act of 2008 regarding distance education. The commission has begun to more consistently review colleges' distance education programs as a part of their accreditation visits.

Higher Education Opportunity Act of 2008 Regulation Impacting Student Authentication

602.17 Application of standards in reaching an accreditation decision.

(g) Requires institutions that offer distance education or correspondence education to have processes in place through which the institution establishes that the student who registers in a distance education or correspondence education course or program is the same student who participates in, completes the course or program, and receives the academic credit. The agency meets this requirement if it:

(1) Requires institutions to verify the identity of a student who participates in class or coursework by using, at the option of the institution, methods such as:

(i) A secure login and pass code;

(ii) Proctored examinations; and

(iii) New or other technologies and practices that are effective in verifying student identification;

(2) Makes clear in writing that institutions must use processes that protect student privacy and notify students of projected additional student charges associated with verification of student identity, if any, at the time of registration or enrollment.

² This committee established through the Board of Governors Standing Order 409.

³ California Code of Regulations, title 5, section 55200 et. seq.

At its June 2012 meeting, the ACCJC adopted policy changes regarding distance education and published its *Guide to Evaluating Distance Education and Correspondence Education*. The commission review teams use this guide to evaluate distance education programs during accreditation visits.

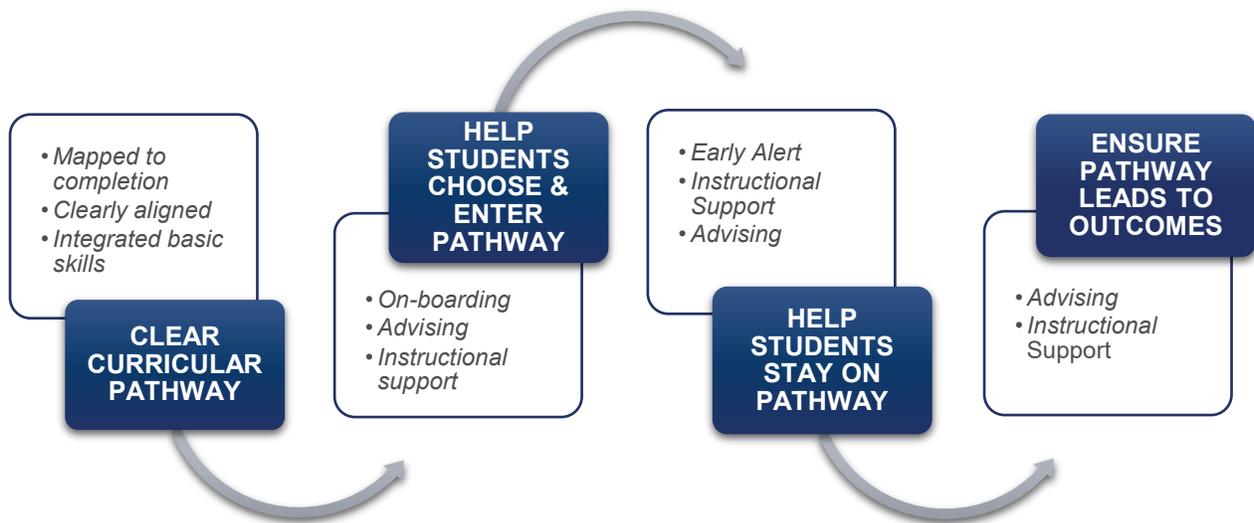
In 2013, a considerable investment of \$16.9 million was made in “Expanding the Delivery of Courses through Technology.”⁴ From that investment came the Online Education Initiative (OEI). With the legislative intent to maximize the development of online courses available across campuses and to alleviate shortages of certain core courses at certain campuses, OEI formed a comprehensive collaboration effort among the California Community Colleges. Through OEI, colleges focus on developing of quality online courses, services and resources for online students, as well as coordinated technology for campuses.

Currently, as distance education continues to grow, the California Community Colleges system is working to address legislative, regulatory and policy barriers to student success. The Board of Governors Distance Education and Educational Technology Advisory Committee meets to tackle regulatory and guidance issues. In January 2017, the group met to frame goals for a comprehensive distance education regulatory change package for implementation in the 2018-19 fiscal year.

The California Community Colleges Chancellor’s Office is embarking on a comprehensive approach to redesign the community college student experience through the Guided Pathways framework. Students will have a clear course-taking pattern that promotes better enrollment decisions. They will also have the help they need throughout their community college experience with integrated support services. Through a distance education guided pathway, students will be better prepared for future success.

⁴ California Budget Act of 2013, Chapter 20

Figure 1: Four Pillars of Guided Pathways



Under the distance education guided pathways model, distance education would follow the four pillars:

1. Create clear curricular pathways — clearly aligned and mapped to completion with integrated basic skills
2. Help students choose and enter the pathway — with advising, on-boarding and instructional support
3. Help students stay on the pathway — with early alert to difficulties and both advising and instructional support to assist
4. Ensure the pathway leads to outcomes — continued advising and instructional support through to completion

Students have the opportunity to take a pattern of courses online at one or more colleges that could lead them to a degree or transfer. With Guided Pathways, finding those opportunities and receiving the support necessary to succeed will help students reach their goals.

History of Reporting

The Board of Governor’s Standing Order 409 requires biennial reporting evaluating the effectiveness of distance education and education technology throughout the California community colleges. In January 2002, the first report by the Chancellor’s Office was *A Seven Year Study of Distance Education in the California Community Colleges: 1994-2001*. This summarized the system’s activities during the seven-year pilot period. It also

identified needed resources and recommendations required to support distance education throughout the California community colleges. The report also included information about student access, enrollment, course completion, and student and faculty satisfaction with distance education.

Starting in 2003 and every two years since, the Distance Education Report is updated to include data from the prior two fiscal years. The last report was completed in August 2013 and covered the five-year period from 2006-07 to 2011-12. This March 2018 edition covers distance education up to the 2016-17 fiscal year.

The Distance Education Report is divided into four sections following the background and methodology. First, an overall summary on distance education in California is presented. Then the report provides details about students in the California Community Colleges who take distance education courses, including their satisfaction and success levels. Details about the number and types of distance education courses and programs follow. A snapshot of the distance education faculty is presented along with their satisfaction levels. Finally, issues important to distance education are discussed.

METHODOLOGY

This report uses data from four primary sources: Chancellor's Office Management Information System and three Chancellor's Office generated surveys.

Chancellor's Office Management Information System (COMIS)

The Chancellor's Office Management Information System was implemented in 1990. It seeks to collect data that can provide answers to fundamental questions related to the areas of students, faculty, staff, and courses. Colleges submit data to the Chancellor's Office within 30 days of the end of each term. Distance education data related to the number of course sessions, Full Time Equivalent Students (FTES), student completion and retention and student demographics are derived from the Chancellor's Office Management Information System.

Three Distance Education Surveys of Students, Faculty and Programs

In January of 2017, the Chancellor's Office sent the "2014-2016 Institutional Distance Education Survey" to all 113 colleges and three centers⁵ to gather information about a range of distance education programs and services. It included survey items on degrees and certificates, student authentication, state authorization, and distance education course development and support. This required survey asks colleges a variety of questions regarding distance education at their campus including how online courses are developed, student services available, and programs offered. This survey is hereinafter referred to as the "2014-16 Institutional Survey."

In February 2017, the Chancellor's Office distributed "Distance Education Student Satisfaction Survey for fall 2016" to 67,552 students who enrolled in and completed a distance education course during that term. General information about the student's online experience and descriptive statistics were included. Also, the survey asked about student interactions and satisfaction related to distance education in five areas: content, instructor interaction, student-to-student interaction, technology and general satisfaction. This survey is hereinafter referred to as the "2016 Student Satisfaction Survey."

⁵ At the time of the survey, Compton Community College was a center and included under that category.

In May of 2017, the Chancellor’s Office sent the “Spring 2017 Distance Education Faculty Satisfaction Survey” to 22 colleges. The goal was to gather information on the faculty perspective. The voluntary survey included general questions about the faculty distance education experience, faculty demographics and faculty satisfaction on three factors: student-related, institutional-related and faculty-related. This survey is hereinafter referred to as the “2017 Faculty Satisfaction Survey.”

DISTANCE EDUCATION IN THE CALIFORNIA COMMUNITY COLLEGE SYSTEM

Distance education has steadily grown over the last 12 years. The number and percentage of course sessions increased. Likewise, the number of students taking distance education courses nearly tripled.

Student Enrollment in Distance Education is Growing

In 2016-17, a total of 860,283 unduplicated students enrolled in a distance education course. They account for 28 percent of the total unduplicated students that year. Table 1, Total Student Headcount in All Distance Education and Traditional Education Course Sessions (Unduplicated headcount), shows the 12-year unduplicated student headcount annually beginning in 2005-06 through 2016-17.

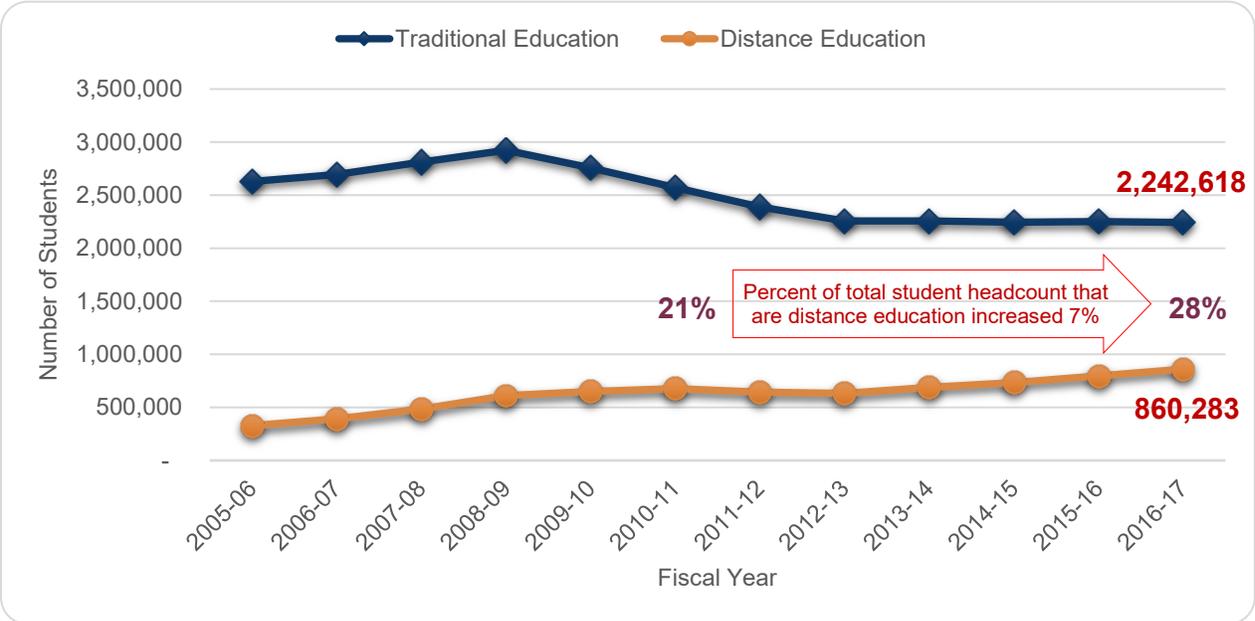
Table 1. Total Student Headcount in All Distance Education and Traditional Education Course Sessions (Unduplicated Headcount)

Fiscal Year	Distance Education	Traditional Education	Total	Percent of Total Headcount
2005-06	328,372	2,630,207	2,958,579	11%
2006-07	392,355	2,694,149	3,086,504	13%
2007-08	483,884	2,810,572	3,294,456	15%
2008-09	611,689	2,923,137	3,534,826	17%
2009-10	649,518	2,758,831	3,408,349	19%
2010-11	675,760	2,570,688	3,246,448	21%
2011-12	643,255	2,388,913	3,032,168	21%
2012-13	633,058	2,257,177	2,890,235	22%
2013-14	687,935	2,256,020	2,943,955	23%
2014-15	732,577	2,244,158	2,976,735	25%

Fiscal Year	Distance Education	Traditional Education	Total	Percent of Total Headcount
2015-16	796,600	2,251,790	3,048,390	26%
2016-17	860,283	2,242,618	3,102,901	28%

Student headcount in distance education courses more than doubled from fiscal year 2005-06 to 2010-11, and nearly tripled by 2016-17. The number of distanced education students previously peaked in 2010-11 at 675,760 with a student increase of 26,242 students before losing 32,505 students in 2011-12. This drop in students reflected an overall drop in students in the California Community Colleges. The number of distance education students not only recovered in 2013-14 but also continues to grow. Just in the last few years, the number of distance education students exceeded 700,000. As of 2016-17, the number of distance education students account for nearly a third of the students in the California community colleges. Figure 2: Total Student Headcount in Traditional Face-to-face Versus Distance Education Course Sessions, highlights that in the last five years the percent of total headcount increased from 21 percent in 2010-11 to 28 percent in 2016-17.

Figure 2. Total Student Headcount in Traditional Face-to-Face Versus Distance Education Course Sessions (Unduplicated Headcount)

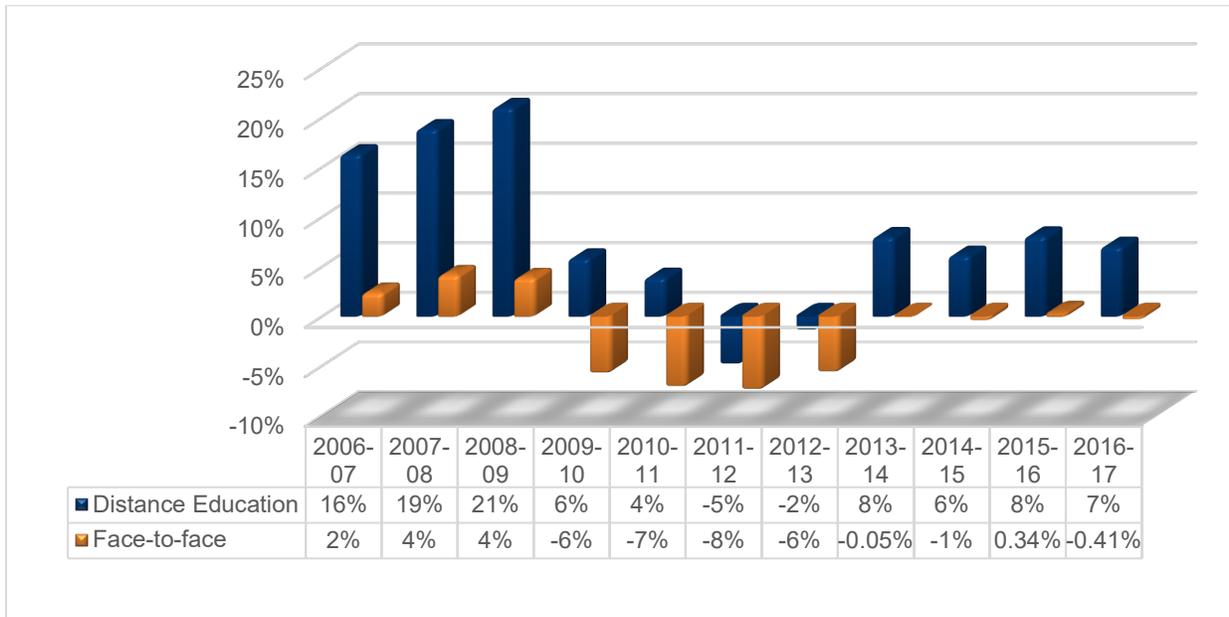


Enrollment Rates: Unduplicated Student Headcount from 2005 to 2016

Distance education enrollment rates had been on a steady climb, averaging 18.7 percent from 2006-07 to 2008-09. Unfortunately, in the three-year period from 2009-10 to 2011-12, severe systemwide budget cuts created shortages and a reduction in course offerings. This in turn produced a three-year decline in overall enrollments. Distance education enrollments slowed but remained positive until 2011-12 when there was a loss of 32,505 students. This was the first time in the history of Chancellor’s Office Management Information Systems data tracking on distance enrollments that there was a decline. In 2013-14, the distance education enrollment rate returned to positive. In fact, the enrollment rate in distance education has outpaced traditional face-to-face enrollments since 2013-14.

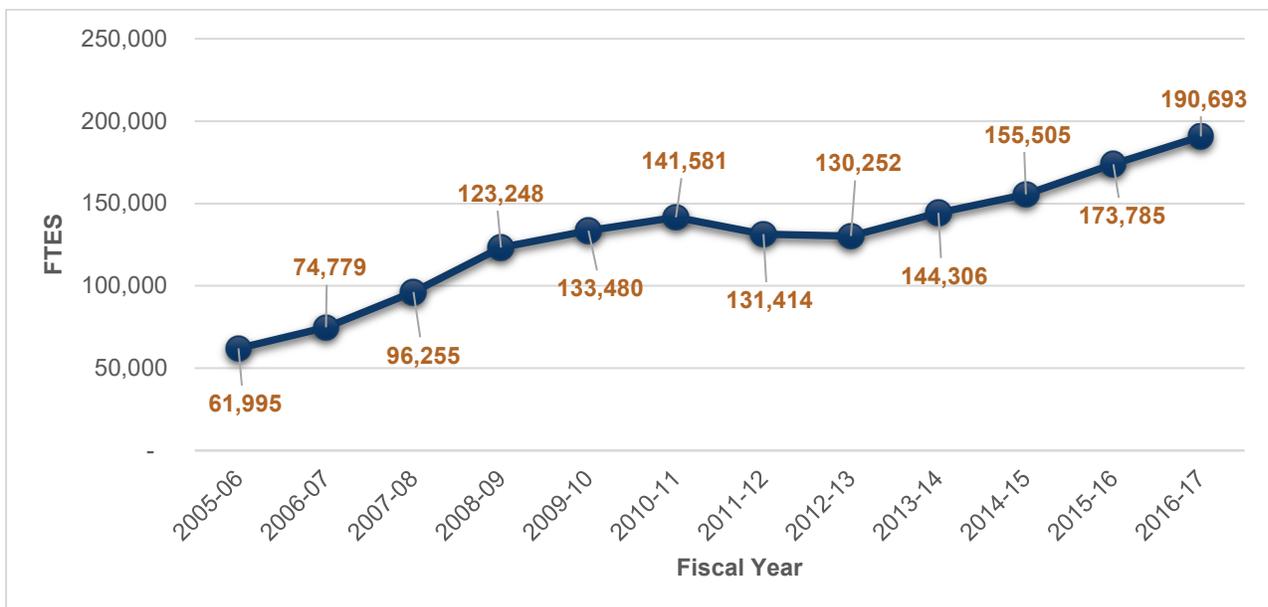
Figure 3, Percent Change in Headcount for Distance Education and Traditional Face-to-Face from 2005 to 2016, shows the increase followed by decline and then subsequent recovery of student headcount since the 2005-06 base year headcount (328,372 for distance education sessions and 2,630,207 for traditional sessions).

Figure 3. Percent Change in Headcount for Distance Education and Traditional Face-to-Face from 2005 to 2016



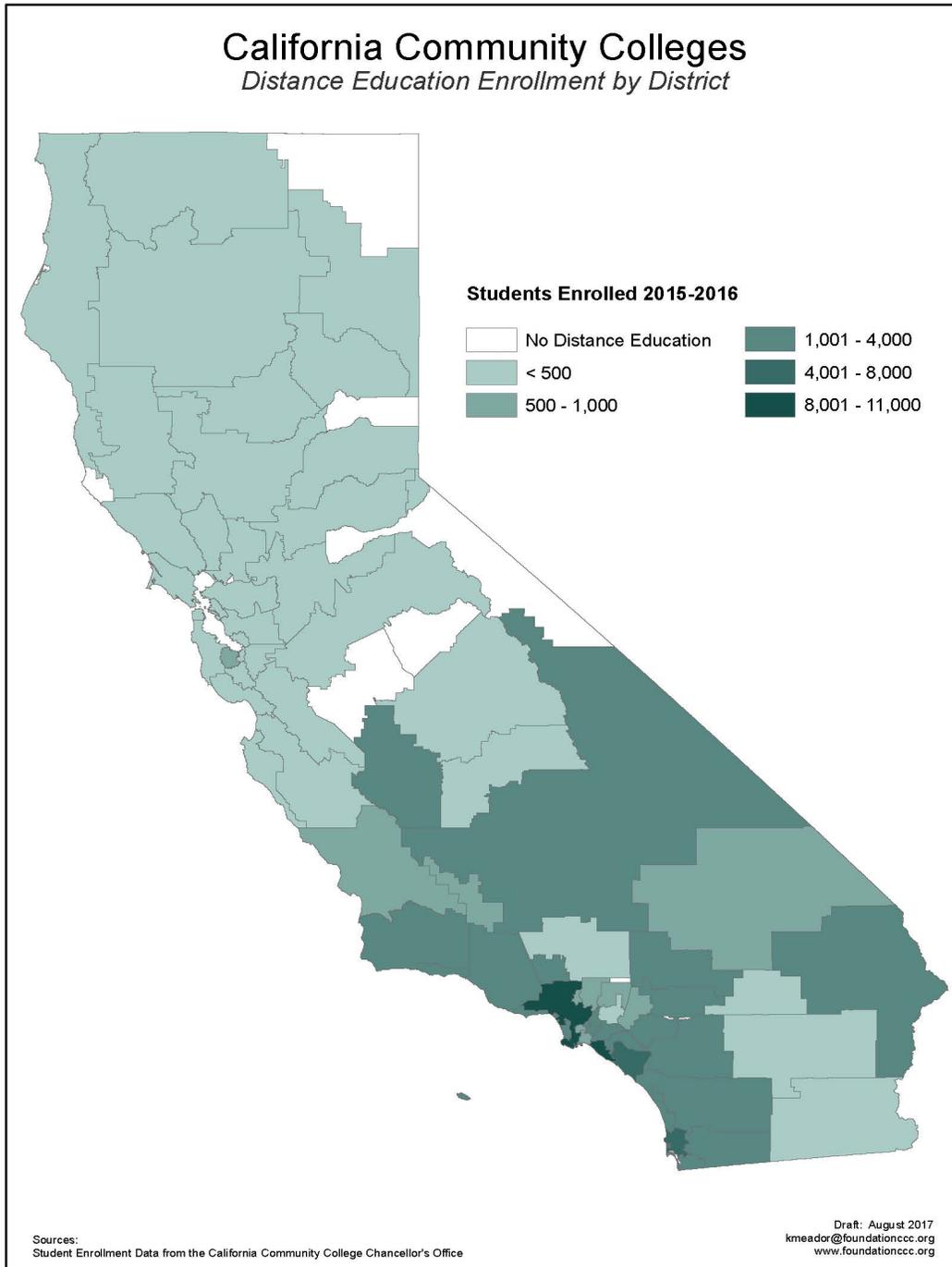
Despite the ebb and flow, overall distance education is growing. With more course sessions and more students enrolling in distance education, there is subsequent growth in Full Time Equivalent Students (FTES). Figure 4, Total FTES for Distance Education, shows that since 2012-13 FTES has climbed.

Figure 4. Total FTES for Distance Education



Concentrations of distance education students across California that are shown in Map 1. Distance Education Enrollment by District 2015-16, reveal the broad range of participation statewide

Map 1. Distance Education Enrollment by District 2015-16



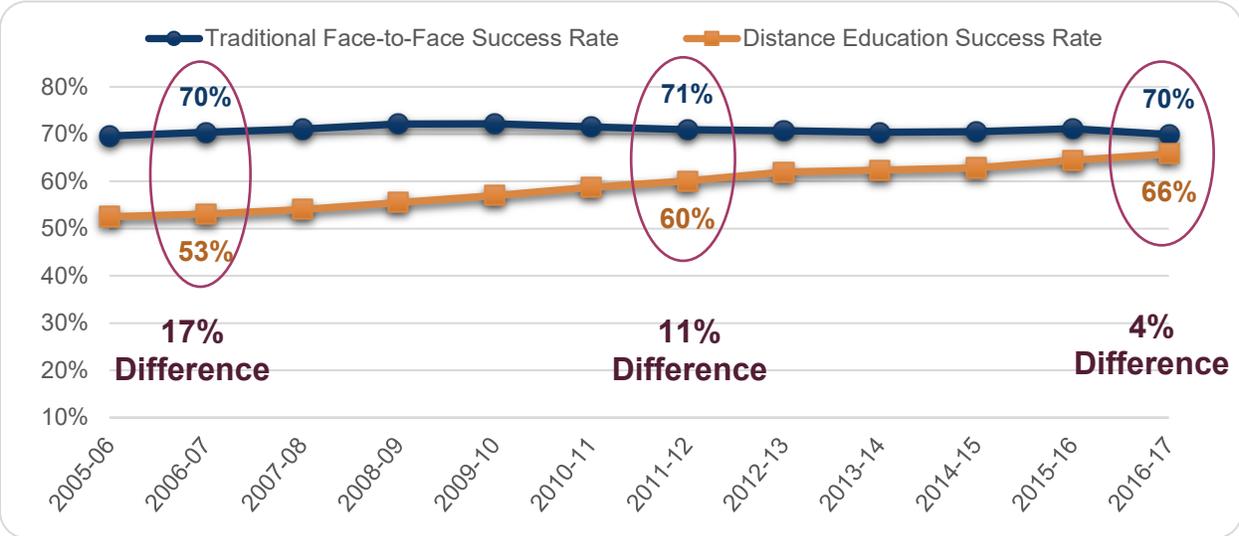
DISTANCE EDUCATION STUDENTS

Overall Success Rates

Appendix A: Success Rates in Distance Education displays the comparison of student success rates between distance education and traditional education courses. This is a duplicated headcount where students taking more than one credit or noncredit distance education course are counted as many times as they are enrolled. That is, if they enrolled in three distance education courses then they were counted three times. The distance education success rate rose slightly in 2014 through 2017, from 63 percent to 66 percent, while the traditional face-to-face success rate remained stable at 70 to 71 percent.

In Figure 5, Success Rates between Distance Education and Traditional Face-to-Face Credit and Noncredit Courses 2005-16, more than half of distance education students successfully completed their courses every year for the last 10 years. Distance education success rates steadily increased year after year while traditional face-to-face success has plateaued in recent years. The gap for the success rate between traditional instruction and distance education instruction closed from 17 percent in 2006-07 to four percent in 2016-17. This is an indication of the improvement in distance education outcomes. The trend also indicates that distance education success is on track to match the success rates for traditional face-to-face instruction.

Figure 5. Success Rates between Distance Education and Traditional Face-to-Face Credit and Noncredit Courses 2005-16



Current Demographics

Enrollment and Successful Completion Rates by Age

Appendix B: Student Enrollment and Completion by Age compares student success rates in distance education by age. There are eight categories: under 18 years; 18-19 years; 20-24 years; 25-29 years; 30-34 years; 35-39 years; 40-49 years; and over 50-years old. Blank responses and unknown age were also included. Figure 6, Percentage of Distance Education Students by Age in 2016-17, shows the largest age group taking distance education courses is in the category of 20-24-year-old students (37 percent), followed by the 18-19 year-old students (18 percent). The third largest group, 25-29 year-old students, is close behind at 17 percent. These three groups combined comprise 72 percent of all students in distance education and indicate that they are under 30 years of age.

Figure 6. Percentage of Distance Education Students by Age in 2016-2017

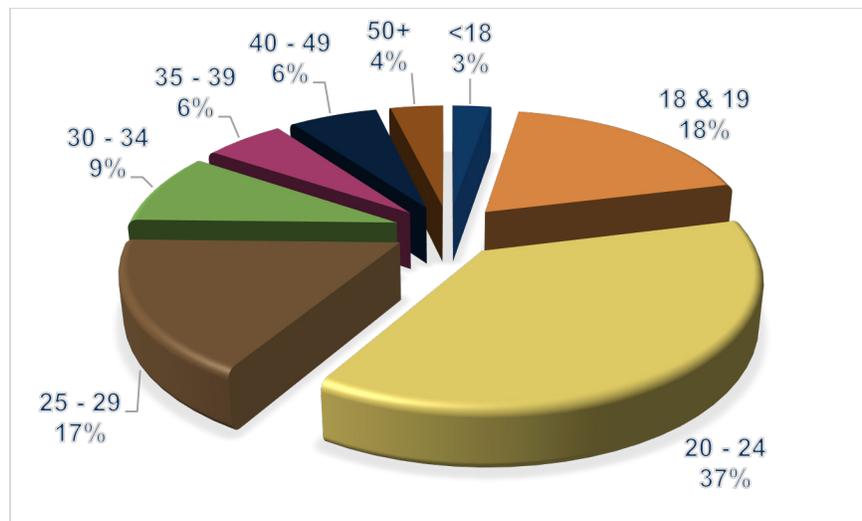


Figure 7, Student Success Rate in Distance Education by Age from 2012-13 to 2016-17, shows that the under-18 year-olds have the highest success rate than all other age groups (between 72-78 percent). By 2016-17, all other age groups have a success rate in the 60-68 percent range.

Figure 7. Student Success Rate in Distance Education by Age from 2012-13 to 2016-17

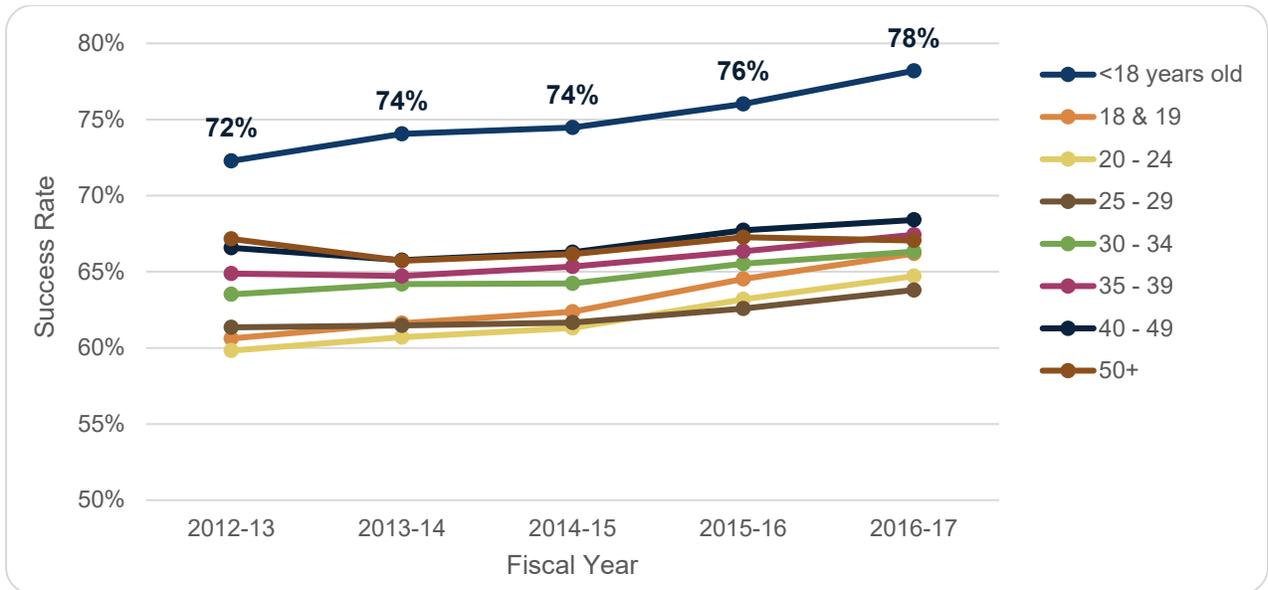
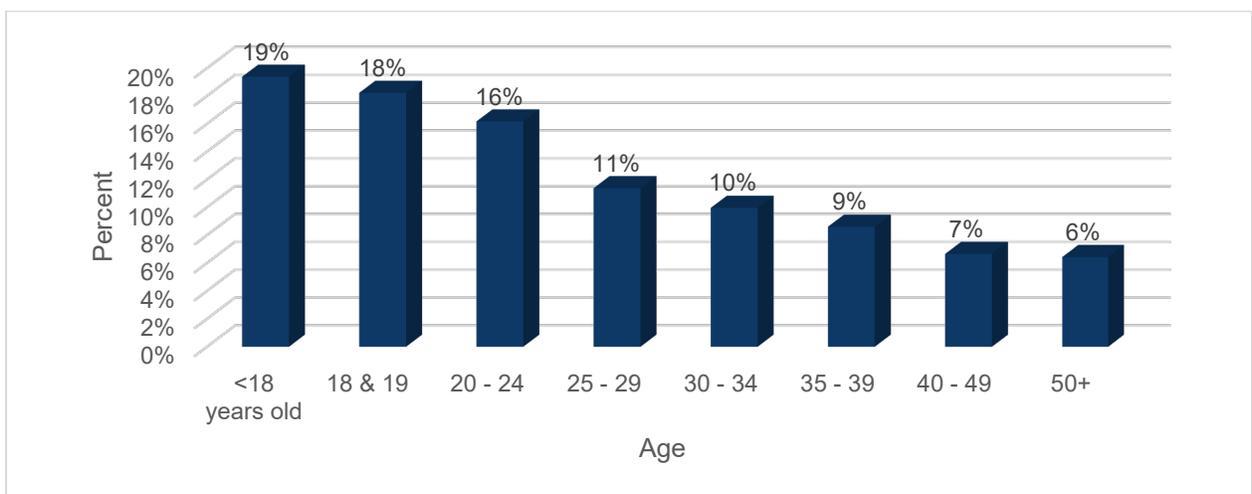


Figure 8, Percent Improvement in Success Rate by Age from 2005-2016, shows how different age groups improved their success in distance education over a 10-year period. The greatest gains in success by age were in the under-18 year-old and 18-19 year-old students. In the earlier years, the gap between the younger age groups and the older age groups were wider. The younger age groups have closed the gap over time.

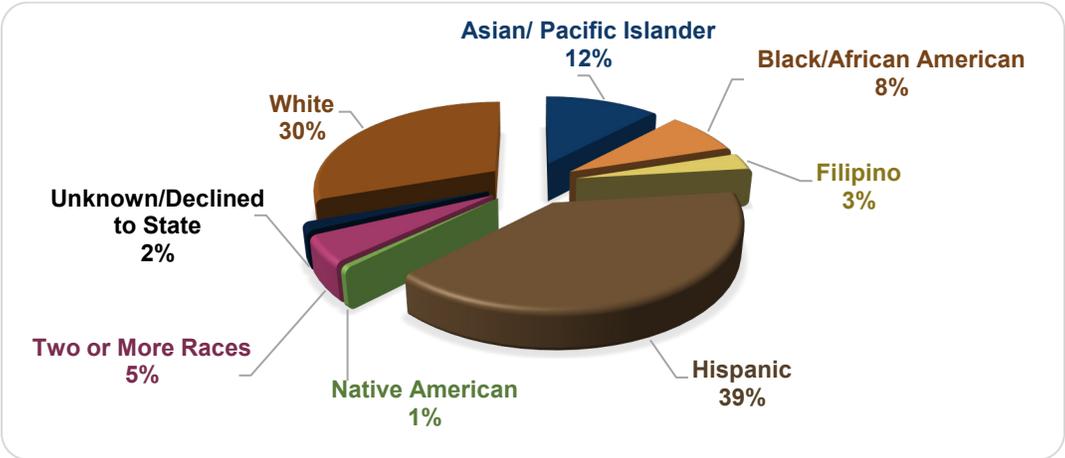
Figure 8. Percent Improvement in Success Rate by Age from 2005 to 2016



Enrollment and Successful Completion Rates by Ethnicity

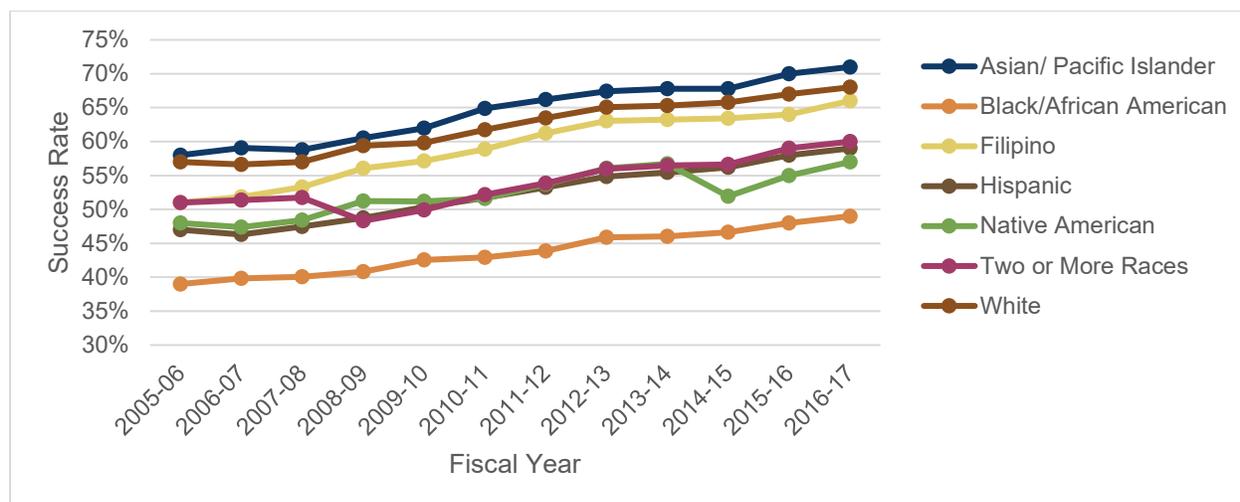
Ethnicity categories are displayed in Figure 9, Percentage of Distance Education Students by Ethnicity in 2016-17. It shows that the largest ethnic group taking distance education courses is Hispanic (39 percent) followed by white (30 percent). This represents a major shift in the students taking distance education courses; as recently as 2012-13, white students continued to outnumber Hispanics in taking distance education courses. However, the following academic year, the number of white and Hispanic students taking distance education courses equalized at 34 percent.

Figure 9. Percentage of Distance Education Students by Ethnicity in 2016-17



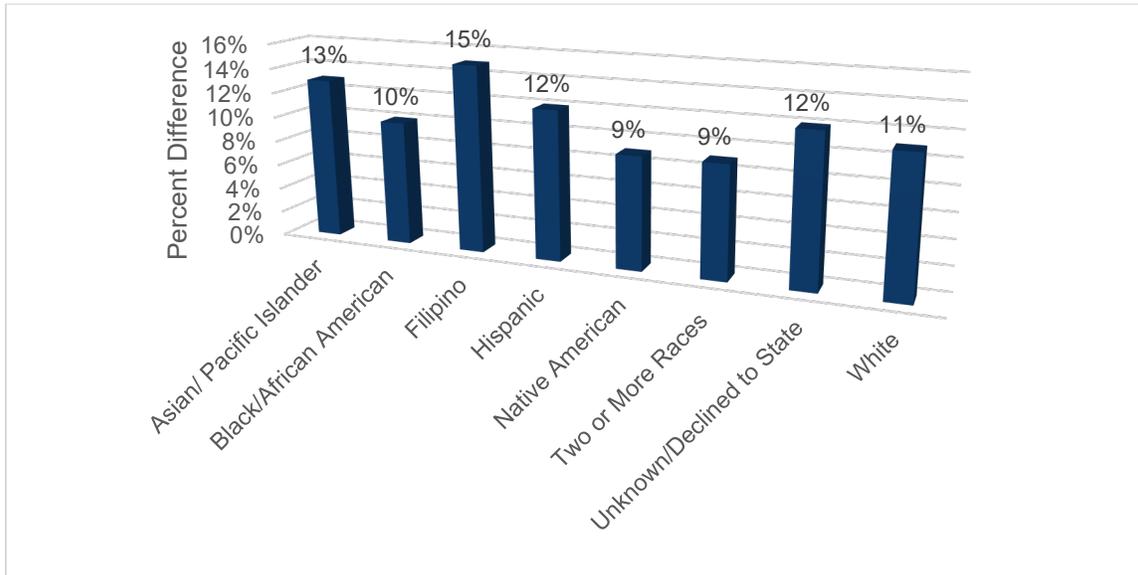
Then, for the first time in 2014-15, the number of distance education students who were Hispanic (35 percent) outnumbered the number of distance education students who were white (32 percent). Appendix C: Student Enrollment and Completion by Ethnicity compares distance education student success rates by ethnicity. Figure 10, Distance Education Success Rate by Ethnicity, from 2005 to 2016 shows that over the 11-year period Asian/Pacific Islanders have had the highest success rates (between 58-71 percent).

Figure 10. Distance Education Success Rate by Ethnicity from 2005 to 2016



They are followed by white students (56-68 percent) and then Filipino students (50-66 percent). However, the lowest success rate over time is among Black/African-American students (between 39-49 percent). In fact, the distance education success rates for Black/African-American students have consistently remained 20 percent behind the most successful students. This will be an opportunity to close the student equity gap in line with the goals of the California community colleges’ strategic vision. The capacity for improvement is possible. Figure 11, Growth in Success Rate by Ethnicity from 2005 to 2016, shows the growth in distance education success rates by ethnicity over an 11-year period. All ethnic groups improved over time. Filipino students had the highest improvement in success rate by 15 percent, while the lowest growth of nine percent was for Native-American students and those students who selected two or more races. With overall success rates topping out at 70 percent, there is room for improvement.

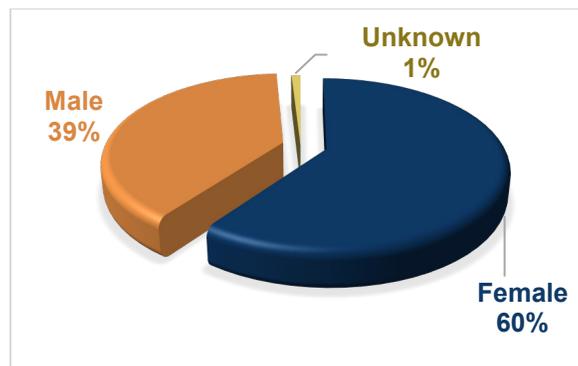
Figure 11. Growth in Success Rate by Ethnicity from 2005 to 2016



Enrollment and Successful Completion Rates by Gender

Figure 12, Percentage of Distance Education Students by Gender in 2016-17, shows more females take distance education courses than males at 60 percent compared to 39 percent. Appendix D displays success rates by gender. Over the 10-year period, females have consistently had a higher success rate than males. However, both groups have improved over time.

Figure 12. Percentage of Distance Education Students by Gender in 2016-17



Enrollment and Successful Completion Rates by Disability

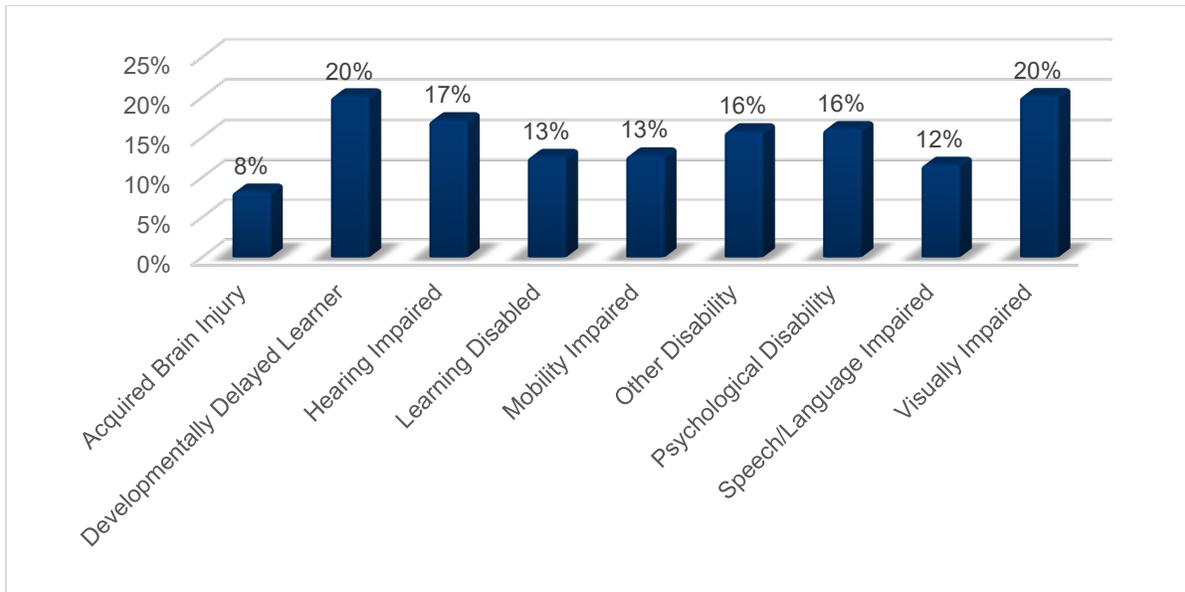
There are nine categories of disabilities that are recorded in Chancellor's Office Management Information Systems data⁶:

- Acquired brain injury
- Developmentally delayed learner
- Hearing impaired
- Learning disabled
- Mobility impaired
- Other disability
- Psychological disability
- Speech/language impaired and visually impaired

Appendix E: Student Enrollment and Completion by Type of Disability displays the success rates of students with disabilities in distance education course sessions. Disabled students are provided a wide range of services to assist them in academic course work. In addition, all distance education courses must be adapted to accommodate disabled learners. Over the 11-year period, all students improved their success rate, as shown in Figure 13, Percent Improvement in Success Rate by Disability from 2005 to 2016. There was significant improvement in success rates for students who are developmentally delayed learners or hearing impaired by 20 percentage points.

⁶ COMIS Data Element SD01: Student Primary Disability

Figure 13. Percent Improvement in Success Rate by Disability from 2005 to 2016



Student Satisfaction and Interactions with Distance Education Courses Survey

To help determine how distance education students interact and perceive their level of satisfaction with their courses, the Chancellor’s Office conducted a distance education student satisfaction survey.⁷ Students who completed a distance education course in the fall term of 2016 were invited to participate. The survey was sent to a stratified random sample of students in 55 colleges. Only students who enrolled in and completed a credit course were surveyed. There were 6,225 responses received out of 67,552 students surveyed (a 9-percent response rate). The survey included descriptive questions about the kind of distance education course that they took. Students were also asked about their satisfaction and interactions in five areas: student to content; student to instructor; student to student; student to technology; and general satisfaction.

Highlights from the survey included in this report are sample population demographics, overall satisfaction with distance education courses, reasons for taking distance education courses, orientation courses/workshops prior to taking distance education courses, student thoughts on discussion board use in distance education courses, and meeting the learning needs of students through distance education courses.

⁷ The survey was based on the research of Dr. Elaine Strachota, PhD, Associate Professor, Concordia University Wisconsin, *The Use of Survey Research to Measure Student Satisfaction in Online Courses*.

Student Demographics of Survey Population

Students completing the survey shared similar demographics with the overall population of California community college distance education students in the areas of age distribution and gender. However, in terms of ethnicity, the respondents were mostly white while the general population of distance education students leans Hispanic. The ratio of females to males was significantly higher by 10 percentage points from 59 percent in the general distance education population to 72 percent in the survey sample population.

Student Satisfaction

The level of satisfaction with a course is a strong predictor of retention and success. Students who are satisfied with online courses and programs persist. In one study, students who had graduated from an online program reported satisfaction levels above 90 percent, compared with 20-percent satisfaction levels reported by those who withdrew from courses.⁸

For overall satisfaction (across all five factors) with their distance education experience, 78 percent of survey respondents either “Strongly Agreed” (33 percent) or “Agreed” (45 percent) with the factors associated with satisfaction. Just 7 percent of the students either “Strongly Disagreed” (2 percent) or “Disagreed” (5 percent) with the satisfaction factors regarding their distance education course.

As compared to face-to-face courses, students indicated that they learned as much in their distance education course, with 68 percent indicating that they “Strongly Agreed” (40 percent) or “Agreed” (28 percent). Students also indicated that they believed distance education courses are as effective as face-to-face courses (38 percent “Strongly Agreed” and 30 percent “Agreed”).

Motivation for Taking a Distance Education Course

The 2016 Student Satisfaction Survey asked distance education students to rate the importance of 16 reasons why they enrolled in their distance education course in the fall 2016 term. Students were asked to rate each reason on a 1-5 Likert scale with 5 as “Very Important.” Each reason also had a “Not Applicable” selection option. Table 2, The Top Seven Reasons Students Took a Distance Education Course in the fall 2016 Term, shows the number one reason was convenience with their work schedule. The

⁸ Hart, Carolyn, Factors Associated With Student Persistence in an Online Program of Study: A Review of the Literature, *Journal of Interactive Online Learning*, Vol. 1, Number 1, Spring 2012

next two top reasons were connected with degree and transfer requirements respectively. The fourth reason was to improve job skills or expand job opportunities. For the 2016 year, “success with a previous distance education course” overtook “I enjoy learning on a computer” for sixth place.

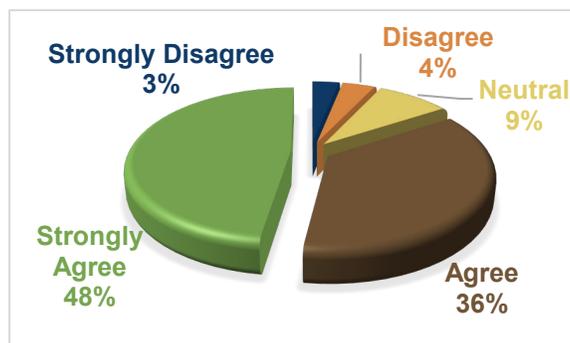
Table 2. Top Seven Reasons Students Took a Distance Education Course in the Fall 2016 Term

Reasons	1 - Not Very Important	2 - Not Important	3 - Neutral	4 - Important	5 - Very Important
The course was convenient with my work schedule	6%	3%	7%	14%	60%
The course met requirements for the associate degree	9%	4%	9%	16%	56%
The course met requirements for transfer to a 4-year college or university	9%	4%	11%	14%	54%
The course would improve my job skills/expand my job opportunities	12%	6%	15%	18%	40%
I had a personal interest in the subject	10%	6%	17%	22%	39%
I had success with a previous distance education course	10%	3%	12%	15%	38%
I enjoy learning on a computer	9%	6%	21%	22%	37%

Meeting the Learning Needs of Students through Distance Education Courses

The 2016 Student Satisfaction Survey asked if the distance education course met their learning needs. Figure 14, Responses to “Distance Education Course Met Student’s Learning Needs” shows that nearly eight of ten students either “Strongly Agreed” or “Agreed” that it did.

Figure 14. Responses to “Distance Education Course Met Student’s Learning Needs”



Only 7 percent of the students either “Strongly Disagreed” (3 percent) or “Disagreed” (4 percent) that the course met their learning needs. When asked if they would take another distance education course 84 percent of the students either “Strongly Agreed” (57 percent) or “Agreed” (27 percent) they would. Only 6 percent of the students who either “Strongly Disagreed” (3 percent) or “Disagreed” (3 percent) they would take another distance education course.

Student Engagement and Discussion Boards

A sense of belonging to a learning community is an important factor for distance education students.⁹ Students who are comfortable establishing relationships in an online environment tend to persist at higher rates. These are students who can successfully participate in online discussions and work with others they do not know or have not met. The feeling of “camaraderie” among students within the class contributes to persistence. Student engagement is a primary factor in establishing such learning communities and achieving success in distance education. It facilitates active learning and reduces isolation, a primary cause for students dropping distance education courses.

⁹ Hart, Carolyn, Factors Associated With Student Persistence in an Online Program of Study: A Review of the Literature, *Journal of Interactive Online Learning*, Vol. 1, Number 1, Spring 2012

One method of facilitating student engagement in distance education courses is through the use of discussion boards. The 2016 Student Satisfaction Survey asked students if their course used discussion boards. If the course did use a discussion board, students were provided follow-up questions about opportunities for problem solving and critical thinking as well as its overall value. A significant number of the students (88 percent) responded that their course included a discussion board. A total of 73 percent of the students either “Strongly Agreed” (41 percent) or “Agreed” (32 percent) with the statement “the online discussion board provided opportunity for problem solving with other students.” Just 11 percent of the students either “Strongly Disagreed” (5 percent) or “Disagreed” (6 percent) with the statement about problem solving with other students.

In response to a similarly phrased question about “the opportunity for critical thinking with other students,” the results were slightly better: 78 percent of students either “Strongly Agreed” (47 percent) or “Agreed” (31 percent) with the statement “the online discussion board provided opportunity for critical thinking with other students.” There were only 9 percent of the students who either “Strongly Disagreed” (4 percent) or “Disagreed” (5 percent) with the statement about the opportunity to do critical thinking with other students. There were only 11 percent of the students who “Strongly Agreed” (6 percent) or “Agreed” (5 percent) with the statement that “the discussion board was a waste of time.”

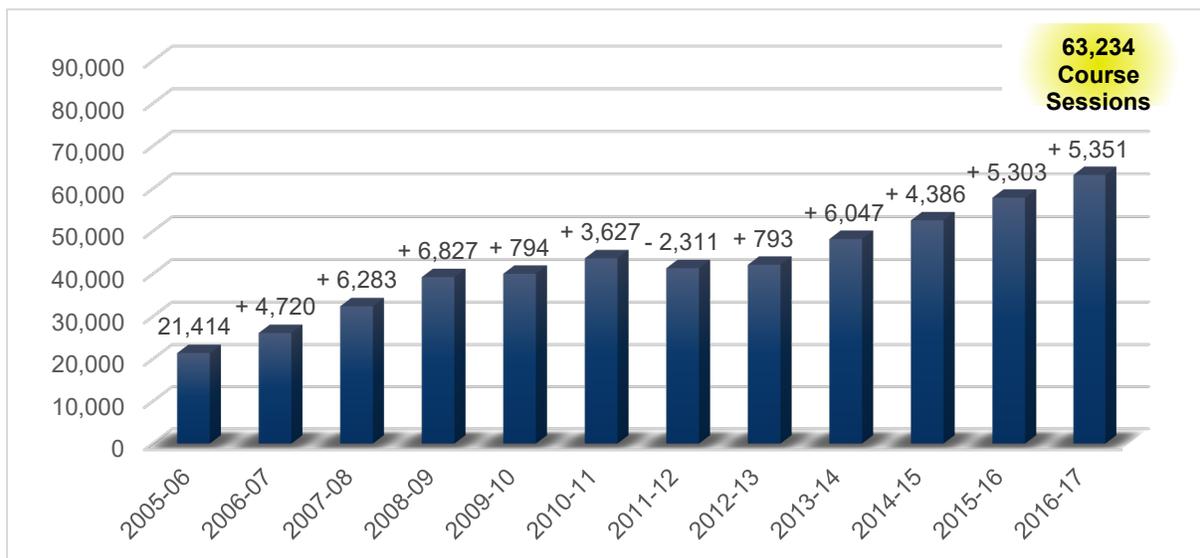
DISTANCE EDUCATION COURSES AND PROGRAMS

Availability of Distance Education Course Sessions

Making up less than one percent of all noncredit course sessions, noncredit distance education represents a small part of distance education as a whole. However, noncredit distance education has grown from seven sessions in 2005-06 to its all-time high of 143 sessions in 2016-17. Given the slight impact of noncredit distance education, this section will address primarily credit distance education.

Figure 15, Growth in Distance Education Course Sessions, shows the steady climb to 53,234 credit and noncredit course sessions.

Figure 15. Growth in Distance Education Course Sessions



In 2005-06, colleges offered 21,407 credit sessions, representing four percent of total traditional education credit sessions. By 2011-12, distance education sessions increased to represent 11 percent of all educational sessions offered even though there was a decline in the number of sessions that year. This occurrence corresponds with the reduced numbers of student enrollments discussed previously. The slowing of the growth was significant. From 2005-06 to 2010-11 there was an average yearly growth of one percent in distance education compared to traditional face-to-face instruction. The growth in 2011-12 from 2010-11 was only 0.16 percent, compared to a 1.32-percent growth from 2009-10 to 2010-11

Table 3, Distance Education and Traditional Education Credit Course Sessions 2005-16, compares the number of distance education and traditional course credit sessions offered and the percentage of the total course sessions.

Table 3. Distance Education and Traditional Education Credit Course Sessions 2005-16

Fiscal Years	Distance Education	Traditional Education	Percentage
2005-06	21,407	456,644	4%
2006-07	26,121	465,680	5%
2007-08	32,380	486,866	6%
2008-09	39,178	482,756	8%
2009-10	39,964	440,933	8%
2010-11	43,561	419,466	9%
2011-12	41,246	391,191	10%
2012-13	42,053	376,289	10%
2013-14	48,087	396,407	11%
2014-15	52,477	407,662	11%
2015-16	57,749	415,687	12%
2016-17	63,091	418,786	13%

Distance Education Course Sessions by Delivery Method

There are 10 types of distance education course delivery methods in the Chancellor’s Office Management Information Systems Data Element Dictionary (DED).¹⁰ Appendix F: Distance Education Courses by Delivery Method defines them and shows the number of

¹⁰ Session Data Element XF01 — Session Instruction Method

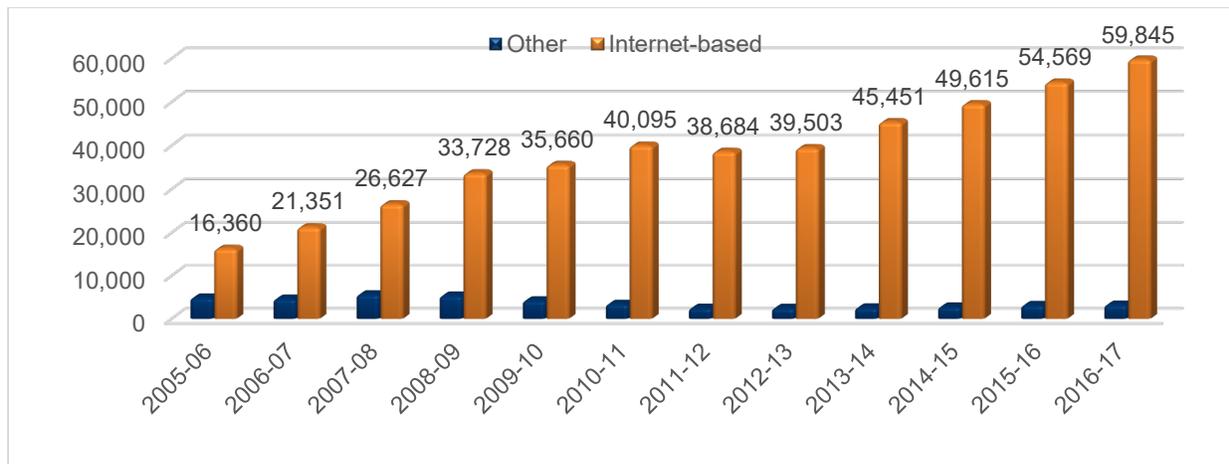
distance education course sessions by delivery method. This section discusses the growth of online instruction as compared to other delivery methods.

Regardless of the method of delivery, there are two types of time-based delivery modes for distance education: synchronous and asynchronous.¹¹ Online instruction using asynchronous time based delivery is by far the most widely used method of conducting distance education because it offers students the greatest flexibility in taking courses. Currently 94 percent of all distance education courses are internet-based courses (87 percent asynchronous, 7 percent synchronous).

There has been a significant shift in delivery methods based on the advent and expansion of internet-based communication technologies. In 1995-96, televised instruction was the primary mode of delivering distance education and accounted for 79 percent of all delivery methods. In 2011-12, it represented just 1.1 percent. The turning point in all online instruction surpassing televised instruction as the predominant delivery mode came in 2002-03. Figure 16, Distance Education Internet-based Sessions Compared to Other Types of Delivery Methods from 2005-16, shows the growth of online distance education and the decrease in other forms of distance education delivery. Other forms of distance education peaked in 2007-08 at 5,787 sessions before falling by 117 percent to 2,670 sessions in 2011-12.

¹¹ Synchronous Communication is direct communication, where all parties involved in the communication are present at the same time (an event). Examples include a telephone conversation, a company board meeting, a chat room event and instant messaging; Asynchronous Communication does not require that all parties involved in the communication need to be present and available at the same time. Examples of this include email (the receiver does not have to be logged on when the sender sends the email message), discussion boards, which allow conversations to evolve and communities to develop over a period of time, and text messaging over cell phones.

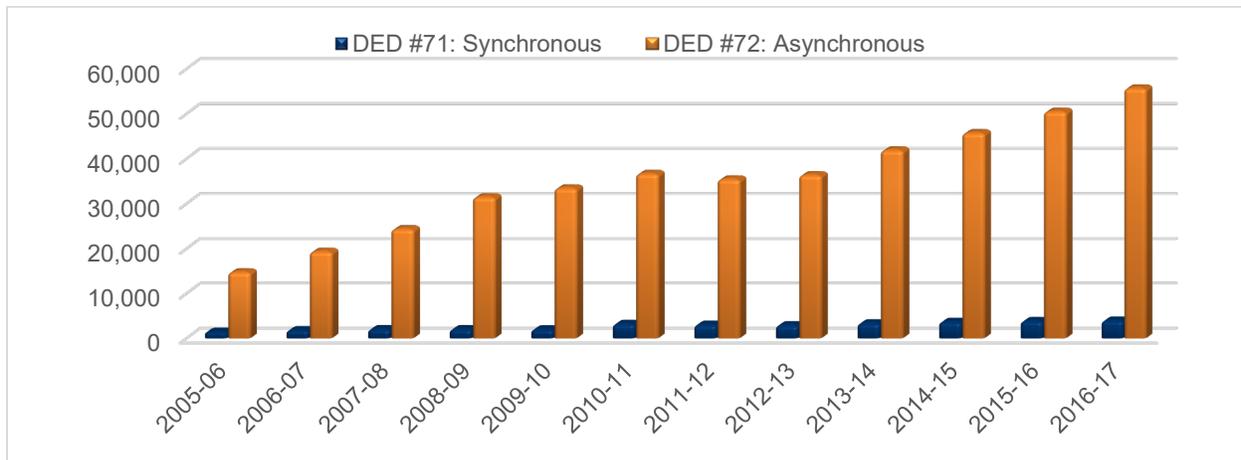
Figure 16. Distance Education Internet-Based Sessions Compared to Other Types of Delivery Methods from 2005 to 2016



While other forms of distance education were declining, internet-based instruction grew. There were more than three times as many internet-based sessions in 2016-17 than there were in 2005-06. Currently, internet-based distance education makes up 95 percent of all distance education course delivery methods.

Internet-based (or online) instruction is divided into synchronous and asynchronous delivery. Synchronous delivery includes simultaneous interaction where the instructor supervises the session using the internet and with immediate opportunity for exchange between participants. Asynchronous delivery includes delayed interaction where the session is not supervised by the instructor, but students use the internet without immediate involvement of the instructor. Figure 17, Synchronous Versus Asynchronous Distance Education Internet-based Courses Sessions from 2005-06 to 2016-17, shows the relationship between the two types of delivery over a 10-year period. In 2016-17, the significant majority of online courses were asynchronous and accounted for over 93 percent of online instruction.

Figure 17. Synchronous (DED #71) Versus Asynchronous (DED #72) Distance Education Internet-Based Courses Sessions from 2005-06 to 2016-17



Course Conversions and Course Development

There are two paths to implementing the expansion of distance education courses: developing new courses or converting existing courses. In the 2014-16 Institutional Survey, 60 colleges reported that they developed new courses. Over the two-year survey period, 751 new distance education courses were developed. Ninety-one (91) colleges converted 3,207 courses to distance education courses. That is an average of 35 courses per college. There were 36 colleges that did not develop new distance education courses while seven colleges did not convert any traditional courses to distance education.

Distance Education Programs Leading to Degrees and Certificates

A sign of maturity in distance education is when a college evolves from offering single courses to at least one comprehensive program exclusively at a distance. Colleges continue to develop robust educational programs offered completely through distance education.

In the 2014-16 Institutional Survey, colleges were asked if they offered a certificate or degree entirely through distance education. Forty-eight (48) colleges reported that they did. A total of 576 programs were reported.

Figure 18. Distance Education Program Awards Offered, 2014-16

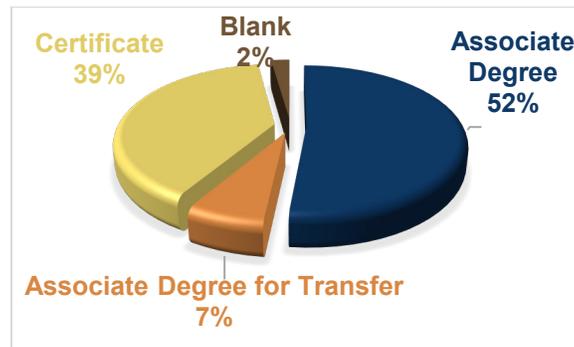


Figure 18, Distance Education Program Awards Offered, 2014-16, shows that more than half of the programs awarded associate degrees (52 percent), while certificates comprised 39 percent. Associate degrees for transfer rounded out the set with 7 percent. Only 2 percent were blank.

The top 10 most common categories of these 100 percent distance education degrees:

1. Business
2. Information Technology
3. Social Sciences
4. Liberal Arts
5. Public Administration
6. Family & Consumer Services
7. Health Occupations
8. Fine Arts
9. Humanities (English)
10. Engineering

For a complete list of entirely online programs reported in the 2014-16 Institutional Survey, see Appendix G: Distance Education Programs Fully Online.

Online Course Exchange

Through the Online Education Initiative, students nearing completion will have access to courses they need via the Online Course Exchange. California community colleges participating in the Course Exchange could cross enroll their students into available online courses at other colleges, while other colleges may do the same with their students. The Course Exchange includes courses in high demand for the Associate Degree for Transfer,¹² fulfill transfer area requirements and fill the fastest.

While currently there are 23 colleges in the consortium, expansion efforts are looking to more than double that number in 2017-18. Likewise, with only six colleges currently offering courses in the Course Exchange, which is an average of 10.67 course sections per college, the goal for fall term 2018 is 300 course sections. This will equal 1 percent of the course sections in the California community college system.

In the meantime, colleges are adopting the student services and course technology necessary to provide online support to students. Ongoing \$10 million was allotted for OEI in the 2017-18 budget. Most of the augmentation (\$8 million) will fund ongoing licensing fees for colleges, while the remainder (\$2 million) will fund online student support services to scale as more and more colleges join the Course Exchange effort.

¹² Associate Degree for Transfer (ADT) is the “Degree with a Guarantee.” Students on this pathway will be able to transfer to a CSU after 60 units.

DISTANCE EDUCATION FACULTY

Faculty-Student Interaction

At the foundation of any quality instruction and educational process is the relationship between the instructor and student. Consequently, the amount, level and depth of the interaction between the faculty member teaching the course and the student taking the course is critical. This is true for either traditional or distance education. However, because of both the physiological space and temporal space differences between the instructor and student in asynchronous distance education, which accounts for almost 90 percent of all distance education, this factor is even more important. In addition to being a foundation of quality instruction, significant faculty-student interaction is a requirement by title 5 of the California Code of Regulations for distance education. Faculty and student interaction also addresses issues of academic integrity and student authentication.¹³

In the 2014-16 Institutional Survey, distance education coordinators were asked what were the most commonly used communications methods of interacting with students by faculty. They were asked to rate eighteen methods of communication.

For the first time, unseating e-mail, the highest rated communication method was the Course Management System (95 percent). Online discussion boards remained in second place (86 percent) and e-mail dropping to third (83 percent). Again, there was a significant drop off to third place with class chat room. It dropped even lower than previous survey years from 15.9 percent to 12 percent. Telephone/computer conferencing occupied the number four spot at 4 percent. The least common method of interacting with students was a tie between Facebook, Twitter, social networking sites, and fax (less than 1 percent). The full results of the responses to the question are displayed in Appendix H, Common Methods of Faculty-Student Interactions.

Inter-College Collaborations

Collaboration between colleges in distance education course development has contributed significantly to the development of distance education courses. Inter-college collaboration can benefit all colleges and enable resources to go further by working with other colleges than working alone. The ability to work together especially in academia is going to be a key strategy for colleges taking on new approaches to improve

¹³ California Code of Regulations, title 5, section 55204 Instructor Contact (a) (b)

performance and outcomes in distance education. College leaders are looking for opportunities for collaboration tools to impact the development and implementation of distance education.

With the goal of achieving greater results, collaboration is the key. One of the main assumptions, and often overlooked, is whether colleges are willing. In the Chancellor's Office 2014-16 Institutional Survey, the distance education coordinators responded that they are willing and have been collaborating with each other on a wide range of distance education related projects. According to research and best practices, the combination of several factors may help steer collaboration to achieve improved academic results, through empowerment, culture, and technology. Here are practical examples of each of these factors that are causing collaboration to work in colleges.

Table 5, Inter-College Collaborations in DE Course Development, displays the responses the distance education coordinators provided to the question, “Has your college collaborated with other colleges to develop, teach, or deliver distance education courses in any of the following areas?” Almost half of the colleges responded to collaborating in three major areas: shared staff development activities between two or more colleges (62 percent); collaborated on distance education program development (54 percent); and shared course materials (45 percent).

Table 5. Inter-College Collaborations in Distance Education Course Development 2014-2016

Method of Collaboration	Yes	No
Collaborated on curriculum development	38%	62%
Used faculty from two or more colleges to teach a course at two or more colleges	19%	81%
Shared equipment or facilities to teach a course at two or more colleges	19%	81%
Shared course materials	45%	55%
Shared staff development activities between two or more colleges	62%	38%
Collaborated on distance education program development	54%	46%

Faculty Training

The subject of faculty training is a subset of professional development. The overwhelming majority of faculty training is done at the local level at the college or through college-sponsored programs. Faculty has a wide range of options to acquire professional development. The primary program for professional development of the faculty is the Flexible Calendar Program. This program is active in 97 percent of the colleges. Flex time is frequently tied to the colleges Education Master Plan goals. Many faculty use their allocated flextime for purposes of developing new curriculum for distance education or redesigning a course for distance education delivery as well as improving their instructional skills as they pertain to distance education instruction. Colleges are developing faculty certification programs and beginning to require faculty to complete certification programs prior to teaching via distance education.

Student retention is a faculty training issue and is an important tool to improve student retention rates for distance education courses. Faculty that have completed some form of certification training for teaching via distance education have better retention rates than those that have not completed any certification training. Faculty recognize that the ability to teach via distance education broadens their marketability and is an opportunity for professional growth.

The @ONE (Online Network for Educators) Project is funded by a Telecommunications Technology and Infrastructure Program (TTIP) grant from the California Community Colleges Chancellor's Office. The Palomar Community College District/Palomar College formerly in conjunction with the Mt. San Jacinto Community College District and currently with Foothill De Anza Community College District administers the grant. This project enables California Community College faculty and staff to learn about technology that will enhance student learning and success. @ONE's programs provide training and online resources for free — or at a very low cost — thanks to funding from the TTIP.

Each year, @ONE offers more than 150 trainings drawing more than 5,600 registrations. Knowledgeable instructors who tailor their content to the specifics of the community college setting teach workshops. Programs are also structured to fit a busy faculty or staff member's schedule. Below are descriptions of the training programs of the @ONE project.

- **Desktop Webinars**

These one-hour webinars present emerging issues and best practices in using technology on a campus. Sessions are conducted with California Community Colleges' Confer meeting software, which allows the participant to view a live PowerPoint presentation and talk with instructors and participants over a phone bridge.

- **Instructor-Led Online Courses**

@ONE's online courses are several weeks in length and give participants an in-depth understanding of how to use specific technologies in an instructional context. Courses include posted materials, links to resources, assignments, and the opportunity to share experiences with college faculty and staff throughout the state via discussion boards. Registration is only \$65 for college faculty and staff.

- **Self-Paced Training**

Self-paced online courses feature many of the same content areas as @ONE's instructor-led sessions but allow the participant to learn on his or her own schedule. Streaming videos demonstrate how technology is being used to enhance learning at California Community Colleges.

A key program for the @ONE project is the Certification Program for Online Instructors, which is a complete certification curriculum pattern for current and future instructors interested in achieving a recognizable standard of excellence in online distance education. The certification program is designed around the International Association for K-12 Online Learning's (*iNACOL*) *National Standards for Quality Online Teaching*, which is designed to provide states, districts, online programs, and other organizations with a set of quality guidelines for online teaching and instructional design. The initiative began with a thorough review of existing online teaching quality standards, a cross-reference of standards, followed by a research survey to iNACOL members and experts to ensure the efficacy of the standards adopted.

- **Certification Program for Online Instructors highlights:**

- Standardized statewide curriculum.
- Curriculum aligned with the International Association for K-12.

- Online learning (iNACOL) standards.
- Course redesign and continuous improvement.
- Complete certification curriculum pattern.
- Establish process and standards to incorporate e-Portfolios to demonstrate participant competency and store training artifacts.
- Custom certification programs for districts and colleges.

Faculty Satisfaction with Distance Education

To add the faculty perspective to the distance education landscape, the Chancellor's Office conducted a distance education faculty satisfaction survey¹⁴. Faculty who taught a distance education course in the spring term of 2017 were invited to participate. There were 359 responses received out of 2,039 faculty surveyed (an 18-percent response rate) at 22 colleges. The survey included descriptive questions about the kind of distance education course taught. Faculty were also asked about their satisfaction and interactions in three areas: student-related (my online students are actively involved in their learning); instructor-related (I have to be more creative in terms of the resources used for the online course); and institutional-related (I have a higher workload when teaching an online course as compared to the traditional one). Together, the three constructs create an overall measure of faculty satisfaction.

Faculty Demographics of Survey Population

Faculty completing the survey were mostly female (64 percent), and age 55 years and older (42 percent). Seventy percent of the faculty are 45 years and older. As illustrated in Figure 20, they were almost equally split between full-time (49 percent) and part-time (46 percent). Details about teaching status are outlined in Table 6: Faculty Teaching Status.

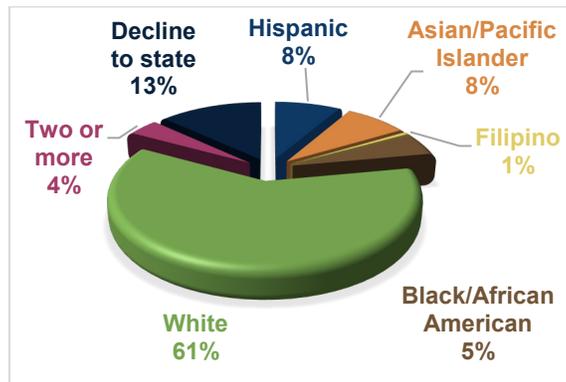
¹⁴ Bollinger, Dorris & Wasilik, Oksana, Factors Influencing Faculty Satisfaction with Online Teaching and Learning in Higher Education, *Distance Education*, Vol. 30, No. 1, May 2009, 103-116.

Table 6. Faculty Teaching Status

Faculty Status	Percent
Full-time faculty teaching exclusively at this community college	42%
Full-time faculty teaching at this and other colleges	7%
Part-time faculty teaching exclusively at this community college	26%
Part-time faculty teaching at this and other colleges	20%
Other — write in	5%

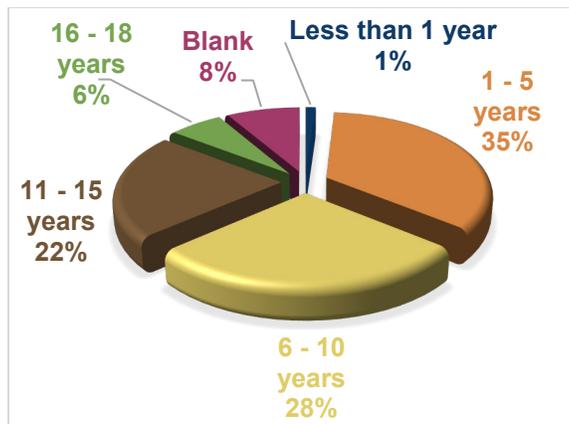
In terms of ethnicity, the respondents were mostly white (61 percent). Figure 19, Faculty Satisfaction Survey Respondents Ethnicity, shows the breakdown for the remaining 39 percent of ethnicities.

Figure 19. 2017 Faculty Satisfaction Survey Respondents Ethnicity



The range of teaching experience of the faculty respondents encompassed “less than a year” to “15 years.” Figure 20, 2017 Faculty Satisfaction Survey Respondents Distance Education Teaching Experience, shows the details. Most faculty were teaching 1-5 years (35 percent) though close behind were the 6-10 years’ category (28 percent).

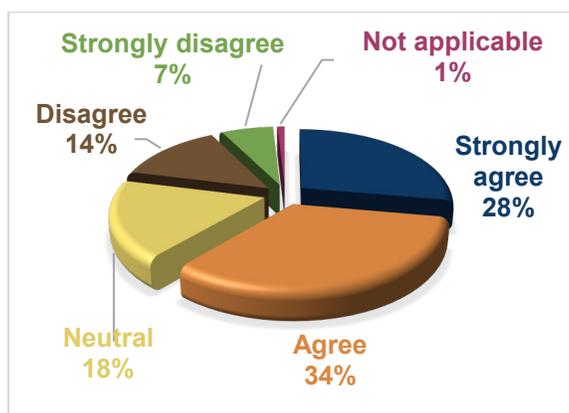
Figure 20. 2017 Faculty Satisfaction Survey Respondents Distance Education Teaching Experience



Faculty Satisfaction

Faculty satisfaction is influenced by perceptions that teaching in an online environment is “effective and professionally beneficial.”¹⁵ For overall faculty satisfaction (across all three factors: student, instructor and faculty) with their distance education experience, 62 percent of survey respondents either “strongly agreed” (28 percent) or “agreed” (34 percent) with the factors associated with satisfaction. Twenty-one percent of faculty respondents either “Strongly Disagreed” (7 percent) or “Disagreed” (14 percent) with the satisfaction factors regarding their distance education course.

Figure 21. Overall Faculty Satisfaction



¹⁵ Bollinger, Dorris & Wasilik, Oksana, Factors Influencing Faculty Satisfaction with Online Teaching and Learning in higher Education, *Distance Education*, Vol. 30, No. 1, May 2009, 103-116.

Motivation for Teaching Distance Education Course

The 2017 Faculty Satisfaction Survey included the item “Identify your primary reason for teaching a distance education course.” Table 7, Faculty Rankings of the Primary Reasons for Teaching a Distance Education Course, shows that 44 percent of faculty ranked “convenience to students” highest. “Technology enhances learning” was second.

Table 7. Faculty Rankings of the Primary Reasons for Teaching a Distance Education Course

Reason	Percent
As a convenience to students	44%
Technology enhances learning	17%
Other — write in	14%
To fit a course into a teaching schedule	8%
The challenge or intrigue of new media technology	7%
To reduce my travel time	5%
No classroom-based assignment was available	5%

Rounding out the top three was “Other — Write in.” A closer look at these open-ended responses revealed that most common reasons were:

- It was assigned to me or it fulfilled the college need
- I’m not local
- It was convenient for me
- I enjoy it
- It is the popular/student preference

RELATED ISSUES

One of the challenges of distance education is the constant comparison to traditional education. Both are expected to provide quality education to California community college students, but in reality, they operate on an uneven playing field. Teaching and learning via distance education pose unique challenges. How can colleges improve the retention of students who may never set foot on a campus? What can colleges do to deliver support services to distance education students? How do we verify that the student enrolled is indeed the student taking the course? These and other issues related to serving students in other states and accessibility are examined in this section.

Retention and Success in Distance Education Courses

Student Retention

Retention of a student in a course is defined as completing the course and receiving an evaluative symbol or a “grade.” For example, students completing the course by the end of a term and received an “A,” “B,” “C,” “D” or “F” have been retained. However, when the student withdraws from a course, then they were not retained. Student Success is defined as a student completing a course and receiving an evaluative symbol of “A,” “B,” “C,” or “Pass.” If the student receives either a “D” or “F,” they are not successful.

Echo Gap

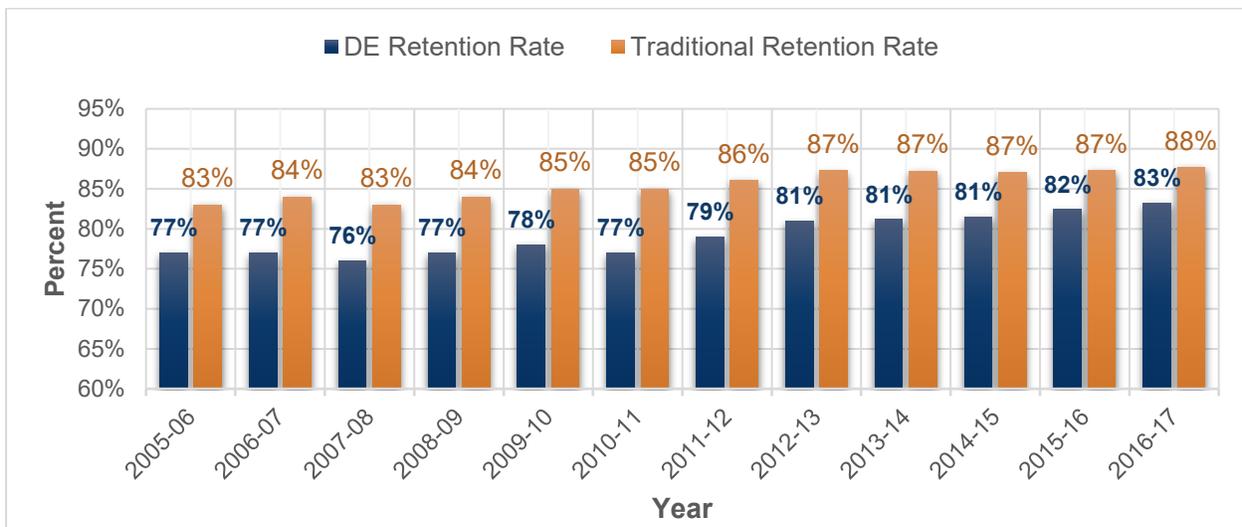
When a student withdraws from a course or receives a non-passing grade, they are entitled to take the course up to three times without a petition. (With a petition, the student can take the course a fourth time.) In these instances, the college is compensated by the State as if the student received a passing grade or as if they completed the course.

When those students who exist in the “gap” between the difference of retention and success rates of traditional face-to-face and distance education courses ultimately re-enroll in the course, then they constitute a re-enrollment “echo.” This “echo gap” when aggregated within one year for multiple prior years of previous withdrawals and unsuccessful completions can represent up to 3 percent of the annual FTES generated by distance education in the CCC System. This phenomenon is not unique to California or the CCC System. The research on retention and success rates for distance education demonstrates and documents that this is a national and international issue.

There is a disparity between the retention rate¹⁶ and success rate¹⁷ of distance education courses compared to traditional face-to-face courses. The “Echo Gap”¹⁸ re-enrollment of distance education students in courses where they were unsuccessful in or did not complete costs the State of California and students millions of dollars a year. The 10-year averages of traditional retention and success rates are 85 percent and 70 percent respectively. The 10-year average of distance education retention and success rates are 78 percent and 59 percent respectively.

Though retention rates have continued to be lower for distance education than traditional education, the rate has improved over time. Figure 25, Distance Education Retention Rates Compared to Traditional Retention Rates 2005-15, shows that both rates are on a slight upward trend.

Figure 25. Distance Education Retention Rates Compared to Traditional Retention Rates 2005-2016



From 2005-06 to 2016-17, the overall improvement in retention rate increased by 5 percent for traditional education and 6 percent for distance education. There is an average retention gap between distance education and traditional instruction of 7 percent over the 11-year period.

¹⁶ The **retention rate** as defined by COMIS as the following formula of numerator/denominator: *Numerator: Number of enrollments with A,B,C,D,F*,CR,NC,I*,P,NP / Denominator: Number of enrollments with A,B,C,D,F*,CR,NC,W,I*,P,NP,DR*

¹⁷ The **success rate** as defined by COMIS as the following formula of numerator/denominator: *Numerator: Number of enrollments with A,B,C,CR,P / Denominator: Number of enrollments with A,B,C,D,F*,CR,NC,W,I*,P,NP,DR*

¹⁸ L. Woodyard, COCCC 2011 COMIS 5-year research data analysis

Retention and success rates can be improved through comprehensive strategies and methods by college. The complex causes for retention and success rate differences require multiple and varied solutions.

Improving Persistence

According to *Factors Associated with Student Persistence in an on Online Program of Study: A Review of the Literature*, persistence is “the ability to complete an online course despite obstacles or adverse circumstances.”¹⁹ The opposite of persistence is attrition, or “withdrawal from an online course.” The following factors were identified as related to student persistence in online courses:

- Satisfaction with online learning.
- A sense of belonging to a learning community. Students who are comfortable establishing relationships in an online environment tend to persist at higher rates. These are students who can successfully participate in online discussions, work with others they do not know or have not met and have a general feeling of camaraderie.
- Peer and family support. The emotional support provided by peers, family and sometimes faculty, is especially important when students are trying to complete online courses at the same time they are coping with hardships or juggling competing demands.
- Time management skills. Good study habits, ability to stay on task with assignments and readings, and able to successfully manage time.
- Increased communication with the instructor. Promptness, the quality of feedback, and the willingness of faculty to meet student needs.

For distance education, the questions of who takes, who teaches, and what content is most appropriate are important to developing, offering and taking courses. If the student is one of those not particularly well prepared for college-level work and not an especially motivated beginning student, online courses early in the college experience may not be advised. Most teachers can learn how to teach online. However, those courses, like any kind of instruction, don't work well automatically. Likewise, online courses can be designed to work well for many students and with most content.

¹⁹ Hart, Carolyn, Factors Associated With Student Persistence in an Online Program of Study: A Review of the Literature, *Journal of Interactive Online Learning*, Vol. 1`, Number 1, Spring 2012

There are three factors that contribute to the problem: student; instructional; and institutional. The solutions must be addressed in all three areas. California community colleges have used a range of methods to improve student retention. As reported in the 2014-16 Institutional Survey, Table 3, Retention Methods and Percentage of Use by Colleges, shows the top categories. The primary method used by most colleges at 86.6 percent is faculty contacting students directly to inquire about their participation in the course. This is a very effective method because it underscores the need to establish regular and effective contact between the faculty member and the student. The research has demonstrated that relationship between the faculty member and the student is a primary factor in improving retention and the success of the student. The next most prevalent method of use is an early alert system to faculty and/or students via email. There are 76.8 percent of the colleges using this method. Colleges also report that they use multiple methods so colleges are combining methods to get the most impact in the area of student retention.

Table 8. Retention Methods and Percentage of Use by Colleges

Retention Method	Percent of Colleges Using this Method	Percent of Colleges Using this Method
	2012-2014	2014-2016
Faculty contacting students when pre-determined parameters of participation are not reached.	86.6%	89%
Early alert notification to student and/or faculty via e-mail.	76.8%	77%
Instructional redesign of the curriculum to assure more learner centered engagement of students.	64.3%	72%
Counselors contacting students when pre-determined parameters of participation are not reached.	20.5%	28%
Predictive analytics using data collected from the Course Management System (CMS).	17.0%	25%
Peer advisors contacting students when pre-determined parameters of participation are not reached.	7.1%	13%

Other commonly used distance education course retention strategies include preemptive methods:

- A readiness assessment or pre-course training orientation (such as Quest for Success or other college onboarding option)
- Orientation to distance education either before or at the start of the course (either in-person or online)
- Faculty training or professional development
- Improved distance education courses
- Improved faculty-student contact early in the course

Colleges also employ several different strategies to identify and respond to students who may be having trouble with their distance education course:

- Early detection tools such as Starfish
- Improved faculty-student contact
- A personal advisor, tutor, coach or counselor assigned to work with distance education students
- Referral to an online tutor or other online tools to assist the distance education student. These include:
 - Cranium Café
 - NetTutor
 - Web links to tutorials
 - Online counseling

Student Support Services

Because of the increasing numbers of distance education students and the development and expansion of courses and programs, colleges face new challenges to provide student services and other support in a virtual world. This phenomenon is not limited to distance education students. Traditional students on campus also want the option to access student services without having to come to campus. In response,

colleges are creating innovative technological and virtual ways to reach all students with student support.

The American Association of Community Colleges, Instructional Technology Council (ITC), reported “adequate student services for distance education students” in the top five greatest challenges in its annual survey about distance education.²⁰ This is significant criterion of the accreditation process if a college offers distance education courses.²¹

According to the ITC survey, colleges are offering critical services such as online registration, tuition payments and library resources to online students. More colleges are expanding their services to include online counselling, advising and tutoring.

In the Chancellor’s Office 2014-16 Institutional Survey, distance education coordinators were asked to work with their student services professionals to identify if 30 student services were offered via the internet, telephone or on campus. They were asked to also identify if the services were offered only on campus or not at all, as well as if the information available was static or interactive. The full summary of their responses can be viewed in Appendix I, Student Services available via the Internet, Telephone or On Campus.

- Service or program is offered only on-campus. Fewer colleges reported that the services or programs listed are offered only on campus. This may indicate less reliance on face-to-face meetings. Services showing the largest declines were in Tutoring at 19 percent (25 percent less than last surveyed in 2014), Transfer planning at 27 percent (16 percent less than last surveyed), and Orientation to college at 11 percent (12 percent less than last surveyed).
- Information available via static web page posting. Across all of the services listed, more colleges are using the web to post information about their student services. Tutoring (Individual & Group) at 61 percent, was up 21 percent since the last survey. Services for Students of Color (55 percent) and Job Placement (52 percent) saw gains of 17 percent from the last survey.

²⁰ Instructional Technology Council National eLearning Report: 2016 Survey Results.

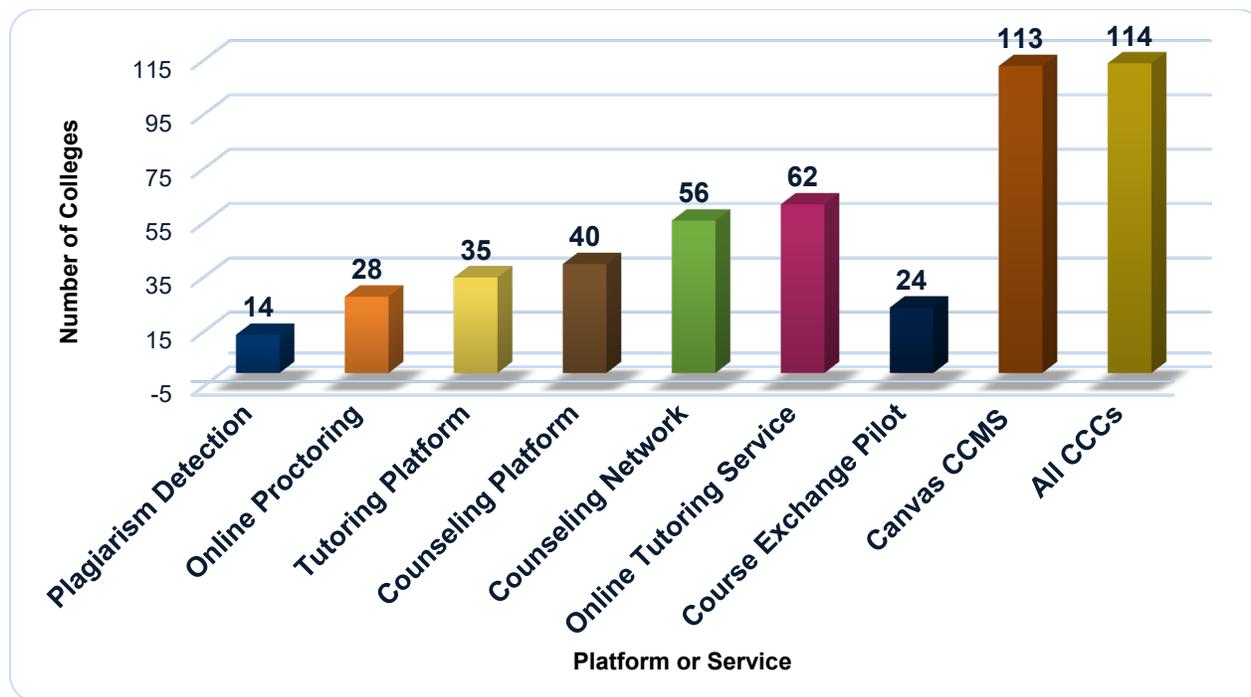
²¹ Guide to Evaluating Distance Education and Correspondence Education, http://www.accjc.org/wp-content/uploads/2012/08/Guide-to-Evaluating-DE-and-CE_2012.pdf

- Student can request or submit information to program or service via an interactive web page — only a few services saw large gains in this category. Tutoring (Individual & Group) at 39 percent saw the largest gains (25 percent more than the last survey). Services for Students Taking Basic Skills Courses (30 percent) saw a 19 percent increase from the previous report.
 - Student can obtain information via the telephone or live chat. As with web postings, more colleges are using phone and chat options to provide services to students. Financial Aid (General Information) was at 57 percent, which is up 20 percent from the previous report. Services for Students of Color (34 percent) and Transcript Ordering/Payment (37 percent) saw increases as well.
 - Offered using video conferencing (workshops, appointments or drop-ins). Academic Advising and Counseling (42 percent) gained 17 percent since the last report. Education Planning (32 percent), Transfer Planning (30 percent), and Services to First Generation College Students (21 percent) all gained 13 percent since the last survey.
- Not offered. E-portfolios (70 percent) and Ethical and Legal Services (Ombudsman) (51 percent) continue to remain high on the list of services in the category of “Not Offered.” Management was at 42.2 percent in the previous report.

OEI’s Efforts to Support Student Services at Colleges

The Online Education Initiative efforts to improve student success through technology encompasses supporting colleges in their efforts to provide services. The Online Education Initiative supports the Canvas course management system for colleges ready to adopt it. OEI also provides technical assistance the adoption and use other tools. Figure 22, College Adoption of the Online Education Initiative’s Platforms and Services (as of Spring 2017), shows that number of college employing those services.

Figure 22. College Adoption of the Online Education Initiative’s Platforms and Services (as of January 2018)



Distance Education Orientation Courses and/or Workshops

Success in a distance education course requires a different set of skills and self-discipline than a traditional face-to-face course. Issues of isolation, engagement, independent thinking, and self-motivation are a few of the factors students must address to succeed in distance education courses. Orientation courses and/or workshops can help students prepare and acclimate to the physical and temporal separation from the instructor. In their study, *The Impact of Face-to-Face Orientation on Online Retention: A Pilot Study*, Radwan Ali of Kennesaw State University and Elke M. Leeds of Kennesaw State University document the impact of face to face orientations and online orientations and their benefits to student retention in distance education.

Face-to-face orientations have been recognized as a successful retention and engagement strategy in numerous studies (Kanuka & Jugdev, 2006; Bozarth, Chapman, & LaMonica, 2004; Wojciechowski & Palmer, 2005). Wojciechowski & Palmer (2005) showed that attendance at a class session was a predictor of online course success. Scagnoli (2001) emphasized, “Orientation for online courses serves the same objectives as orientation for college, in the sense that it can facilitate academic and social interactions, increase student involvement,

enhance the sense of belonging to a virtual learning community, and help retention.” (p.19) Others recommended orientations to help manage students' expectations and generally prepare them for distance learning (Carnevale, 2000a; Carr, 2000; Chyung, 2001; Ludwig-Hardman & Dunlap, 2003; Nash, 2005; Rovai, 2003; Ryan, 2001; Scalese, 2001; Tresman, 2002). Orientations present many opportunities for managing students' expectations, preparing them for distance learning. Nash (2005) noted that student drop-rates are related to the expectation that online courses are easier than campus-based courses. Orientations can help describe the demands for a particular course, introduce technology standards, and allow for social and professional networking (Carnevale, 2000a; Carr, 2000; Chyung, 2001; Ludwig-Hardman & Dunlap, 2003; Nash, 2005; Rovai, 2003; Ryan, 2001; Scalese, 2001; Tresman, 2002).

The 2016 Student Satisfaction Survey asked students if they had ever taken a distance education orientation course or workshop at their college. Only one-fifth of students responding (20 percent) indicated they did, indeed, take an orientation/workshop. Of those responding “Yes,” 57 percent stated it was a requirement before being able to take a distance education course, 43 percent said it was voluntary. A total of 53 percent indicated it was a credit course and 47 percent stated it was a workshop for no credit. The most common number of units for the orientation course was three units. When asked how they completed the distance education orientation experience, the number one method was online with an instructor at 36 percent, compared to 34 percent online without an instructor and 31 percent face to face with an instructor. Overall 73 percent of the students were either “very satisfied” (42 percent) or “satisfied” (31 percent) with the orientation course or workshop.

State Authorization

Historically, over time, every state has established laws and rules governing institutions operating within their boundaries. The fundamental premise of these laws has been the concept of “physical presence” — in order to be subject to regulation *by* a state an institution had to be located *in* that state.

The notion of physical presence is changing. Many states consider the conduct of “instructional” activities the appropriate trigger for state oversight. The term “instructional” has several definitions, from the aggregation of learners in “electronic classrooms” to individual students interacting with the institution via the Internet, and in a number of states there is no definition at all — the application of the term is a matter of specific circumstances. Some agencies consider whether an institution is “operating”

in their state. Again, the term “operating” is differently defined, and again in many cases not defined at all. Finally, a substantial plurality of states considers as part of their determining whether to assert jurisdiction, the degree to which an institution “directly targets” their residents.

California community colleges are required to obtain authorization from a state prior to providing distance education opportunities to their students residing in that state. Colleges must comply in each state in which they “operate.”

In December 2016, the U.S. Department of Education, Office of Postsecondary Education, issued Final Regulations to amend the State Authorization section of the Institutional Eligibility regulation issued under the Higher Education Act of 1965, as amended. These regulations clarify the state authorization requirements an institution must comply with in order to be eligible to participate in the Title IV programs. As a result, the uncertainty has ended with respect to state authorization and closing gaps in state oversight to ensure students, families, and taxpayers are protected. The regulations are scheduled to take effect July 1, 2018.

A national effort has been under way for the past several years to adopt a nationwide coordinated and uniform solution for federally mandated state authorization. In just a few short years, the new organization has signed on 49 of the states. Called the State Authorization Reciprocity Agreement (SARA), the compact establishes a state-level reciprocity process. California has not joined SARA, in part due to concerns expressed by consumer and student advocates over the level of protection the agreement provides for students enrolled in proprietary institutions. The Chancellor’s Office will continue to evaluate SARA and work with stakeholders to evaluate the benefits and drawbacks of participation in the reciprocity agreement.

There are four regional compacts — the Western Interstate Commission for Higher Education (WICHE), Midwestern Higher Education Compact (MHEC), the New England Board of Higher Education (NEBHE), and the Southern Regional Education Board (SREB) — that ensure state regulators in their region have the proper processes in place to monitor compliance, in addition to having their state on board for a centralized and uniform student complaint process. Individual institutions must pay an annual fee of \$2,000/\$4,000/\$6,000 — depending on annual FTE — to be part of SARA. The SARA initiative enables participating states recognizing participating institutions based on reciprocal agreements between states.

The Chancellor's Office is a member the State Authorization Network (SAN), a national consortium that provides information and guidance to colleges and universities on this topic. The SAN is not a SARA and is intended to benefit primarily non-SARA institutions. This information from the monthly SAN conference calls is shared with the college distance education coordinators as it is made available. The State Authorization topic is a consistent item on the monthly distance education coordinators and managers meetings conducted by the Chancellor's Office.

Colleges were surveyed in the 2014-16 Institutional Survey about their level of out-of-state distance education. They were asked, "Do you serve students via distance education in other states?" There were 51 colleges (46 percent) that are serving more than 4,284 students in other states. There was a total of 30 colleges at the time of the survey who have applied for approval in other states. Seven colleges have applied for approval in 49 of the 50 states, while nine colleges have applied for approval in only one state. States with the most agreements are Texas (72 percent) and Arizona (66 percent). Hawaii, Nevada, North Carolina and Washington all tied for third place at 62 percent. The remaining colleges have chosen not to serve students from any other states using distance education. Colleges will have to decide if serving students in other states is cost beneficial for them as they move forward with state authorization requests.

Substantive Program Changes

Colleges are required to submit a substantive change proposal to the Accrediting Commission for Community and Junior Colleges (ACCJC) when the mode of delivery represents a significant departure from current practice.²² For distance education, this may mean a conversion of a face-to-face program to one where more than 50 percent is online or for degree or certificate programs offered 100 percent online.

The need to submit a substantive change proposal is triggered by the addition of courses that constitute 50 percent or more of a program offered through a mode of distance or electronic delivery.

Example: When an institution offers courses that make up 50 percent or more of the credits required for a program through an instructional delivery that is new for the college such as online instruction it is required to submit a substantive change request to the Commission. Federal law mandates that accrediting agencies require institutions

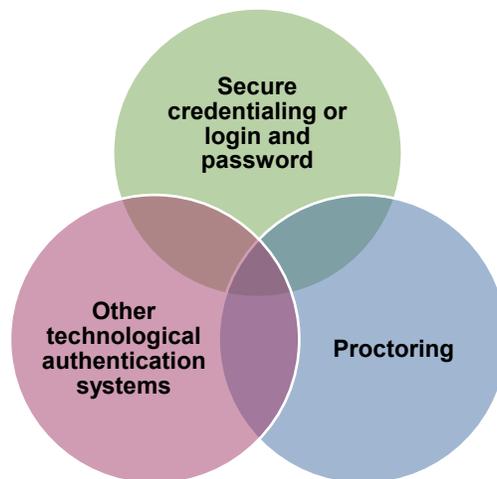
²² [ACCJC Substantive Change Manual](https://accjc.org/wp-content/uploads/Substantive-Change-Manual.pdf) — <https://accjc.org/wp-content/uploads/Substantive-Change-Manual.pdf>

to obtain accreditor approval of a substantive change before the degree is granted at the institution.

Student Authentication

Unique to distance education is the federal requirement that processes are in place that authenticates the student registering in a distance education course or program, is the student completing that course or program,²³ Furthermore, accrediting agencies must ensure that colleges use secure login and pass codes, participate in proctored exams or use other technologies for authentication.

Figure 23. Criteria for Student Authentication



Every California community college is using a distance education Course Management System (CMS) that meets the first criteria identified above for secure credentialing/login and password. However, the regulation guidelines place an expectation that colleges will continue to look at future technological solutions. While colleges are for the most part compliant with the regulations, few have taken formal positions on student authentication.

When campus distance education coordinators were asked if their district had a board of trustees approved student authentication policy, 20 percent selected “No board policy or administrative procedure.” This means 80 percent either have a policy, administrative procedure and/or something in development, which is slightly better than the 77 percent reporting in 2012.

²³ Higher Education Opportunity Act of 2008

Distance education coordinators were also asked, “Do you re-verify a student’s identity at exams or other evaluations?” Thirty-nine percent responded yes, which is lower than previous reporting years.

Figure 24, Various Student Authentication Methods Used by Colleges, shows majority of the colleges are using the Student ID/User ID embedded in the Course Management System (99 percent). The next most employed method of student authentication is physical proctoring for exams (72 percent). The third most common method of student authentication is “writing style software for anti-plagiarism” (68 percent).

Figure 24. Various Student Authentication Methods Used by Colleges



Distance Education Accessibility

Nationally, the biggest challenge facing distance education program administrators is addressing accessibility and universal design.²⁴ The California Community Colleges

²⁴ ITC Annual National eLearning Report: 2016 Survey Results.

system continues to promote and support the development of accessible instruction on three fronts: Distance Education Accessibility Guidelines for Students with Disabilities; High Tech Center Training Unit; and Distance Education Captioning and Transcription (DECT) Grant.

Distance Education Accessibility Guidelines for Students with Disabilities

In January 2011, the Chancellor's Office issued a resource for supervisors of Disabled Students Program and Services (DSPS), assistive technology specialists, alternate media specialists, distance education coordinators, instructional designers, faculty, Americans with Disabilities Act 504 coordinators, trainers and administrators. These guidelines provide an extensive revision to the 1999 *Distance Education: Access Guidelines for Students with Disabilities* and an expansion of the guidance provided in the interim document, *Distance Education Guidelines, 2008 Omnibus Version*.

Since 1996, the California Community Colleges system has been striving to fulfill its obligations to assure accessibility and usability of all college offerings, including those provided through distance education, for people with disabilities. These 2011 *Distance Education Accessibility Guidelines* were developed in response to the results of a 2007 statewide needs assessment study appraising the resources needed to ensure that online distance education delivered in the system is accessible. The needs assessment was conducted after a recommendation by the High Tech Center Training Unit Advisory Committee, with the support of the Distance Education and Education Technology Advisory Committee, and following observations by the High Tech Center Training Unit that steps to ensure accessibility of distance education offerings varied significantly by local expertise, capacity and the level of resources available to the college.

Since the publication of the 1999 *Distance Education: Access Guidelines for Students with Disabilities*, there has been explosive growth in the number of distance education courses provided by the 114 campuses. Concomitant growth is evident in the technologies available to faculty in developing exciting and interesting course offerings, including information and communication technologies, course delivery systems and assistive technology. Despite the pace and complexity of technological advances, faculty and the overall institution have responsibility to ensure that distance education course materials and resources are accessible to students with disabilities.

High Tech Center Training Unit

The High Tech Center Training Unit is a Disabled Students Program and Services grant-funded project awarded to the Foothill-De Anza Community College District. It houses a state-of-the-art training, support facility and venue for community college faculty and staff who wish to acquire or improve teaching skills, methodologies, and pedagogy in assistive computer technology, alternate media, and web accessibility. The High Tech Center Training Unit provides trainings, information and support in several areas related specifically to distance education, including the following:

- Accessible PowerPoint
- Captioning Web-Based Media
- Creating Accessible Web Content
- Creating Accessible PDF Documents
- Creating Accessible Forms & Tables
- Formatting with MS Word
- Section 508

Most of these trainings are held at their facility in Cupertino, in a live face-to-face environment. Additionally, High Tech Center Training Unit staff can (and often does) visit individual campuses to provide on-site trainings for staff and faculty to assist the campus in fulfilling its obligations to provide access for students with disabilities.

To reach DE faculty, the High Tech Center Training Unit partnered with @ONE to develop an accessibility training as part of @ONE's certificate program for online teaching and learning: Creating Accessible Online Courses. In addition to a link to the Distance Education Accessibility Guidelines, the High Tech Center Training Unit website provides a range of resources from manuals to curriculum to specialized lists at www.htctu.net.

Utilizing an annual budget of \$1 million, the High Tech Center Training Unit grant allowed for more than 80 separate trainings in 2016-17 either on-site at a college or at their facility on various topics such as section 508, creating accessible PDFs, implementing Universal Design for instruction, technology training on Zoom Text and other software, captioning, math accommodations and Braille Boot camps.

Distance Education Captioning and Transcription Grant

The Santa Clarita Community College District (SCCCD) has responsibility for the Distance Education Captioning and Transcription grant. The purpose of the grant is to provide assistance to all California community colleges in the facilitation of live and off-line captioning and transcription services for California community colleges. The program is intended to aid California community colleges in improving their capacity to serve the disabled student populations and, in some instances, the general public, by ensuring the accessibility of aural information. The district establishes outside contracts with captioning vendors to provide assistance to any community college that elects to use these vendors. Colleges can receive funds to pay for these services in advance or on a reimbursement basis. In 2016-17, the Distance Education Captioning and Transcription grant

- Served 50 colleges
- Assisted 21,962 students
- Approved 163 applications
- Captioned 456,115 minutes

The Chancellor's Office also supports distance education captioning and transcription for all 114 community colleges through a grant for \$1 million specifically for the purpose of funding live and off-line (asynchronous) captioning and transcription. For colleges offering distance education courses that are required to be captioned, help is available for this critical systemwide need.

LOOKING AHEAD FOR DISTANCE EDUCATION IN THE CALIFORNIA COMMUNITY COLLEGES

California community college distance education administrators, coordinators and faculty are working collaboratively to meet the growing student demand for courses and programs that fit their needs. Specifically, online education community are finding ways to remove technological, statutory and regulatory barriers to competitively meet demand. Colleges are positioning themselves to absorb the expected growth in distance education by adopting best practices, technologically innovating and continuously improving distance education on their campus.

Distance Education and the California Community Colleges Strategic Vision

In July 2017, the Board of Governors adopted a bold Strategic Vision for the California Community Colleges, a vision that focuses the vast resources of the system on supporting California residents in achieving their career goals. Distance education is an effective instructional delivery method that will help fulfill the goals of the Strategic Vision. The flexibility of asynchronous learning will enable students to achieve the courses to fill in the schedules that allow students reach the 20-percent goal of acquiring associate degrees, certificates credentials or specific skill sets for careers.

The Online Course Exchange will provide access to courses from across multiple colleges that transfer seamlessly to complete Associate Degrees for Transfer to support the 35-percent increase in students transferring to the University of California and the California State University. Improved retention and success in distance education will eliminate the “Echo Gap” and contribute to the reduction of the average number of units accumulated by the students helping to reduce costs and the time to degrees and certificates. Increased number of Career Education courses and certificates offered online will support the goal of helping students become employed in their field of study from its existing 60 percent to the goal of 69 percent.

The improved success across the board for underrepresented students over the last 10 years will continue due to improved preparation of students taking distance education courses, better-trained faculty, and the improved design of distance education courses. All will contribute to the reduction of the equity gap for all of the goals of the Strategic Vision.

Distance Education and Guided Pathways in the California Community Colleges

The Guided Pathways framework will be strongly supported by distance education in a focused strategy to leverage the existing and growing degree and certificate programs. The expansion of the Online Course Exchange to more colleges and the improved marketing of these online programs to students will foster the availability to complete degrees and certificates by being able to find, take and import courses from teaching colleges to a student's home college.

A concerted effort to publicize clear online curricular pathways to employment and further education will expose and increase the number of students along this pathway and enable them to achieve their goals faster and more efficiently. Improved access and success to online counseling for online students will support their ability to choose and stay on an online degree pathway. Effective use of the layers of tools and infrastructure alerts embedded into the standard course management system adopted by 98 percent of all colleges will ensure students stay on their selected online pathway. The strong online course rubric used in the Online Course Exchange will ensure that learning is focused and appropriate with the intentional outcomes of Guided Pathways. Distance education will become an important arrow in the quiver of Guided Pathways.

California and State Authorization and Reciprocity Agreements

In July 2018, federal regulations and state laws will require a college to obtain the authorization of another state where it is not physically located before it can deliver distance education into that state. This process first brought to light in 2009 is gaining greater importance as distance education continues its growth and adoption by students across all spectrums. As the economy improves a common trend has produced leveling and in many colleges a decrease in enrollments of California community colleges. Markets outside California offer colleges opportunities to grow enrollments and expand their brand of quality online education.

State authorization regulation and laws place a barrier in front of colleges by requiring human capital and significant budget allocations to enter and expand in the interstate delivery of the distance education market. Each college in each district must contact each state and pay accompanying fees that it wants to deliver distance education to in order to receive that state's authorization. Regional [State Authorization Reciprocity Agreements](#) eliminate these barriers by enabling colleges to pay one small fee based on enrollments, currently no more than \$6,000 to deliver distance education to 98

percent of the nation versus costs in excess of \$200,000 in budgets and time to achieve the same goal.

Currently, California is the only state that has not taken legislative action to join a regional agreement that would enable California community colleges to easily access students in other states. In 2015, efforts to allow California to be a part of a State Authorization and Reciprocity Agreement were unsuccessful. Renewed interest, lagging enrollments, and being at a distinct disadvantage to colleges in the other 49 states are driving interest to reengage in efforts to permit colleges to be on a competitive footing with other colleges. California has elected to not formally join a State Authorization Reciprocity Agreement, largely due to questions and concerns that have been expressed by student and consumer advocates regarding the extent to which the agreement provides and allows for adequate oversight of proprietary institutions.

Breaking Through Statutory and Regulatory Barriers

Through well established, distance education partnerships, efforts to eliminate statutory and regulatory barriers to student success will be a priority in 2017-18.

For example, regulatory and procedural challenges regarding enrollment of online students in different colleges resulted in delays for students and associated audit concerns. Joint efforts between the Online Education Initiative and the California Community College's Chancellor's Office resulted in the determination that a statutory change was required. Adopted into law, Assembly Bill 637 (Medina, 2017) established online cross-enrollment between California community colleges. This bill gives students real-time access to high demand courses that fill quickly and assurance of immediate electronic transfer of relevant enrollment data. Online cross-enrollment will also save colleges' time and resources by eliminating the duplicate process of determining residency of online students.

In 2018, the Distance Education and Education Technology Advisory Committee will prepare recommendations for a comprehensive update of distance education guidelines, policies, regulation or statute. Focus areas include examination and clearer guidance surrounding:

- **The Family Educational Rights and Privacy Act and audit requirements.** Sorting myth from fact and the complex nature of attendance accounting distance education.

- **Distance education accreditation.** Examination and clarification of the Accrediting Commission for the Community and Junior Colleges (ACCJC) distance education guidance.
- **Improving distance education curriculum.** Share guidelines for well-designed and quality distance education course development, explore the details of the separate approval process for distance education in title 5, and share best practices on the distance education addenda.
- **Statewide definitions of distance education.** Depending on the how and under what circumstances they are used, multiple definitions exist for coming distance education terms such as “online,” “hybrid” and “regular and effective contact.”

Important to the effort in breaking through statutory and regulatory barriers will be communicating the message to the colleges and, more specifically, the administrators and faculty who will ultimately implement the changes.

Distance education is offered at every community college in California. Leveraging opportunities and resources with the Institutional Effectiveness Partnership Initiative, the Strong Workforce effort and Guided Pathways framework will advance distance education for the colleges and students resulting in a positive impact on the state.

Fully Online California Community College

In Gov. Jerry Brown’s 2017-18 proposed May revision to the California State Budget, he reiterated the benefits of online education for students as well as the financial burden on individual college budgets to provide online education. The Governor intended to “bring together segment leaders and other stakeholders to determine how deployment of these resources can be aligned to achieve shared goals and better serve students.” As part of this effort, the governor asked the California Community Colleges Chancellor’s Office to develop a proposal for a completely online college by November 2017. This mission was broadly stated and included:

- Building on existing efforts that foster student success.
- Increasing the availability of online courses and degree programs that make colleges more accessible and affordable.
- Increasing the chances of students achieving their goals.

- Taking whatever steps necessary.

Chancellor Eloy Ortiz Oakley responded to the request by developing a broad and diverse group of stakeholders into an advisory committee. They met over several months and developed four possible designs for consideration for the online community college that will serve workers who need skills and credentials to advance their careers. This online college will partner with industry sectors, organized labor and employers to offer the skills their employees need. In the proposed California State Budget for 2018-19, the governor included \$120 million for the development of the fully online college; \$100 million of that amount is a one-time fund and \$20 million is ongoing.

APPENDIX A: SUCCESS RATES IN DISTANCE EDUCATION

Success Rates for Credit and Noncredit Distance Education and Traditional Education Course Sessions
(Duplicated Headcount)

Distance Education Completion

Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Completed	319,888	392,424	500,394	654,944	699,887	749,107	725,591	737,604	817,781	890,853	1,006,710	1,122,514
Not Completed	289,014	346,572	425,815	525,200	527,646	525,813	481,280	452,845	492,637	526,063	554,574	583,113
Total	608,902	738,996	926,209	1,180,144	1,227,533	1,274,920	1,206,871	1,190,449	1,310,418	1,416,916	1,561,284	1,705,627
Success Rate	53%	53%	54%	55%	57%	59%	60%	62%	62%	63%	64%	66%

Traditional Education Completion

Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Completed	7,145,077	7,288,470	7,683,734	8,244,615	7,989,274	7,408,449	6,840,326	6,425,486	6,503,331	6,459,201	6,422,080	6,144,423
Not Completed	3,119,316	3,060,022	3,125,057	3,179,108	3,076,146	2,947,425	2,802,110	2,660,325	2,735,837	2,695,128	2,603,411	2,641,439
Total	10,264,393	10,348,492	10,808,791	11,423,723	11,065,420	10,355,874	9,642,436	9,085,811	9,239,168	9,154,329	9,025,491	8,785,862
Success Rate	70%	70%	71%	72%	72%	72%	71%	71%	70%	71%	71%	70%

APPENDIX B: STUDENT ENROLLMENT AND COMPLETION BY AGE

Distance Education Student Enrollment and Completion Rate by Age (Duplicated Headcount)

Age	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
<18	Completed	6,987	9,617	12,128	16,403	15,661	14,288	12,653	13,332	17,061	20,201	27,256	36,058
<18	Not Completed	4,892	6,647	8,324	10,814	9,095	6,722	5,513	5,113	5,976	6,924	8,600	10,051
<18	Total	11,879	16,264	20,452	27,217	24,756	21,010	18,166	18,445	23,037	27,125	35,856	46,109
<18	Rate of Completion	59%	59%	59%	60%	63%	68%	70%	72%	74%	74%	76%	78%
18 & 19	Completed	47,224	57,908	75,831	98,397	112,738	120,242	113,926	118,890	134,929	149,728	178,187	207,913
18 & 19	Not Completed	51,229	61,281	77,675	92,644	96,462	92,340	80,110	77,239	84,029	90,327	97,944	106,187
18 & 19	Total	98,453	119,189	153,506	191,041	209,200	212,582	194,036	196,129	218,958	240,055	276,131	314,100
18 & 19	Rate of Completion	48%	49%	49%	52%	54%	57%	59%	61%	62%	62%	65%	66%
20-24	Completed	104,986	130,185	164,873	213,592	231,386	250,538	248,131	260,996	295,430	326,651	370,900	413,524
20-24	Not Completed	111,298	134,272	163,065	197,224	198,811	199,684	184,454	175,292	191,321	206,175	216,038	225,488
20-24	Total	216,284	264,457	327,938	410,816	430,197	450,222	432,585	436,288	486,751	532,826	586,938	639,012
20-24	Rate of Completion	49%	49%	50%	52%	54%	56%	57%	60%	61%	61%	63%	65%

Age	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
25-29	Completed	50,080	63,076	83,043	111,465	118,266	126,472	122,200	122,235	134,280	147,534	164,677	182,714
25-29	Not Completed	45,445	54,931	69,138	88,104	87,553	88,070	82,088	77,013	84,183	91,713	98,484	103,657
25-29	Total	95,525	118,007	152,181	199,569	205,819	214,542	204,288	199,248	218,463	239,247	263,161	286,371
25-29	Rate of Completion	52%	53%	55%	56%	57%	59%	60%	61%	61%	62%	63%	64%
30-34	Completed	33,077	39,838	50,855	68,410	70,376	76,469	74,603	74,053	80,018	85,820	94,502	102,439
30-34	Not Completed	25,608	29,629	36,691	47,034	47,769	49,097	46,368	42,539	44,623	47,795	49,690	52,011
30-34	Total	58,685	69,467	87,546	115,444	118,145	125,566	120,971	116,592	124,641	133,615	144,192	154,450
30-34	Rate of Completion	56%	57%	58%	59%	60%	61%	62%	64%	64%	64%	66%	66%
35-39	Completed	25,077	30,217	38,725	49,285	49,116	50,984	47,894	45,817	50,196	54,065	59,300	64,476
35-39	Not Completed	17,551	20,857	25,226	31,999	30,360	30,498	27,189	24,800	27,359	28,671	30,074	31,139
35-39	Total	42,628	51,074	63,951	81,284	79,476	81,482	75,083	70,617	77,555	82,736	89,374	95,615
35-39	Rate of Completion	59%	59%	61%	61%	62%	63%	64%	65%	65%	65%	66%	67%
40-49	Completed	36,157	42,435	51,043	65,369	66,983	70,958	66,733	63,139	64,918	66,031	68,906	72,447
40-49	Not Completed	22,396	26,390	30,633	38,282	37,667	38,982	35,708	31,698	33,798	33,585	32,830	33,466
40-49	Total	58,553	68,825	81,676	103,651	104,650	109,940	102,441	94,837	98,716	99,616	101,736	105,913

Age	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
40-49	Rate of Completion	62%	62%	62%	63%	64%	65%	65%	67%	66%	66%	68%	68%
50+	Completed	16,232	19,095	23,844	31,943	35,268	39,098	39,401	39,112	40,896	40,788	42,950	42,922
50+	Not Completed	10,546	12,512	15,025	19,032	19,847	20,376	19,819	19,127	21,330	20,857	20,900	21,098
50+	Total	26,778	31607	38,869	50,975	55,115	59,474	59,220	58,239	62,226	61,645	63,850	64,020
50+	Rate of Completion	61%	60%	61%	63%	64%	66%	67%	67%	66%	66%	67%	67%
Unknown	Completed	67	49	51	78	88	57	50	28	51	33	28	20
Unknown	Not Completed	49	42	36	67	75	33	31	24	18	16	12	15
Unknown	Total	116	91	87	145	163	90	81	52	69	49	40	35
Unknown	Rate of Completion	58%	54%	59%	54%	54%	63%	62%	54%	74%	67%	70%	57%

APPENDIX C: STUDENT ENROLLMENT AND COMPLETION BY ETHNICITY

Distance Education Student Enrollment and Completion Rate by Ethnicity in Credit Course Sessions (Duplicated Headcount)

Ethnicity	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Asian/Pacific Islander	Completed	40,739	52,311	65,326	81,686	84,400	101,856	99,519	100,737	109,205	113,616	130,793	147,888
Asian/Pacific Islander	Not Completed	29,804	36,327	45,871	53,400	51,799	55,334	50,942	48,717	52,016	54,059	57,682	61,711
Asian/Pacific Islander	Total	70,543	88,638	111,197	135,086	136,199	157,190	150,461	149,454	161,221	167,675	188,475	209,599
Asian/Pacific Islander	Rate of Completion	58%	59%	59%	60%	62%	65%	66%	67%	68%	68%	69%	71%
Black/ African-American	Completed	21,134	25,400	32,703	48,158	46,608	52,082	49,975	48,984	55,681	58,686	63,064	65,792
Black/ African-American	Not Completed	33,488	38,412	48,891	70,546	63,116	69,973	64,352	57,670	65,320	67,198	68,141	68,149
Black/ African-American	Total	54,622	63,812	81,594	118,704	109,724	122,055	114,327	106,654	121,001	125,884	131,205	133,941
Black/ African-American	Rate of Completion	39%	40%	40%	41%	42%	43%	44%	46%	46%	47%	48%	49%
Filipino	Completed	10,164	13,114	17,970	22,700	21,694	23,202	22,277	22,687	25,109	27,710	30,198	34,520

Ethnicity	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Filipino	Not Completed	10,075	12,171	15,760	17,861	16,335	16,257	14,154	13,308	14,639	16,012	16,666	17,926
Filipino	Total	20,239	25,285	33,730	40,561	38,029	39,459	36,431	35,995	39,748	43,722	46,864	52,446
Filipino	Rate of Completion	50%	52%	53%	56%	57%	59%	61%	63%	63%	63%	64%	66%
Hispanic	Completed	54,834	69,043	92,843	126,477	141,384	170,400	181,461	200,077	241,206	279,961	336,190	392,255
Hispanic	Not Completed	64,405	80,163	102,662	134,974	140,938	161,153	160,707	166,061	195,560	219,798	247,164	273,127
Hispanic	Total	119,239	149,206	195,505	261,451	282,322	331,553	342,168	366,138	436,766	499,759	583,354	665,382
Hispanic	Rate of Completion	46%	46%	47%	48%	50%	51%	53%	55%	55%	56%	58%	59%
Native American	Completed	3,519	4,414	5,347	6,578	5,369	4,821	4,104	3,918	3,837	4,214	4,932	5,509
Native American	Not Completed	3,902	4,905	5,697	6,307	5,065	4,562	3,555	3,077	2,938	3,924	4,095	4,188
Native American	Total	7,421	9,319	11,044	12,885	10,434	9,383	7,659	6,995	6,775	8,138	9,027	9,697
Native American	Rate of Completion	47%	47%	48%	51%	51%	51%	54%	56%	57%	52%	55%	57%
Two or More Races	Completed	5,956	7,537	9,022	244	9,861	19,342	24,543	28,754	34,543	39,314	44,273	50,112
Two or More Races	Not Completed	5,876	7,141	8,407	261	9,873	17,766	21,043	22,614	26,665	30,145	31,340	32,910

Ethnicity	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Two or More Races	Total	11,832	14,678	17,429	505	19,734	37,108	45,586	51,368	61,208	69,459	75,613	83,022
Two or More Races	Rate of Completion	50%	51%	52%	48%	50%	52%	54%	56%	56%	57%	59%	60%
Unknown/ Declined to State	Completed	25,850	32,547	43,805	75,977	90,381	53,090	37,934	29,111	26,573	24,809	24,267	24,871
Unknown/ Declined to State	Not Completed	20,820	27,428	36,186	60,855	68,778	36,389	24,793	16,578	14,841	13,668	12,482	11,786
Unknown/ Declined to State	Total	46,670	59,975	79,991	136,832	159,159	89,479	62,727	45,689	41,414	38,477	36,749	36,657
Unknown/ Declined to State	Rate of Completion	55%	54%	55%	56%	57%	59%	60%	64%	64%	64%	66%	68%
White	Completed	155,807	185,598	225,268	277,851	279,140	298,078	281,602	275,670	286,038	301,934	327,930	351,412
White	Not Completed	122,173	142,185	170,146	191,258	186,070	185,339	162,368	148,287	152,321	157,504	159,200	163,471
White	Total	277,980	327,783	395,414	469,109	465,210	483,417	443,970	423,957	438,359	459,438	487,130	514,883
White	Rate of Completion	56%	57%	57%	59%	60%	62%	63%	65%	65%	66%	67%	68%

APPENDIX D: STUDENT ENROLLMENT AND COMPLETION BY GENDER

Distance Education Student Enrollment and Completion Rate by Gender (Duplicated Headcount)

Gender	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Female	Completed	200,641	244,575	305,512	394,200	419,447	441,585	425,320	427,611	467,503	509,966	578,826	650,163
Female	Not Completed	179,232	214,495	264,494	328,115	323,267	321,846	296,381	276,288	303,308	326,939	347,912	370,025
Female	Total	379,873	459,070	570,006	722,315	742,714	763,431	721,701	703,899	770,811	836,905	926,738	1,020,188
Female	Rate of Completion	53%	53%	54%	55%	56%	58%	59%	61%	61%	61%	62%	64%
Male	Completed	115,375	143,009	183,338	239,059	252,644	274,055	269,516	276,193	308,177	333,540	374,411	410,083
Male	Not Completed	109,679	132,349	166,402	203,055	213,979	220,127	201,182	196,065	216,750	230,960	243,312	251,615
Male	Total	225,054	275,358	349,740	442,114	466,623	494,182	470,698	472,258	524,927	564,500	617,723	661,698
Male	Rate of Completion	51%	52%	52%	54%	54%	55%	57%	58%	59%	59%	61%	62%
Unknown	Completed	1,987	2,380	3,434	6,412	6,746	7,231	6,579	6,134	6,512	6,738	8,410	10,022
Unknown	Not Completed	1,632	1,888	2,724	4,292	4,728	4,800	4,351	3,959	4,242	4,409	5,546	6,116
Unknown	Total	3,619	4,268	6,158	10,704	11,474	12,031	10,930	10,093	10,754	11,147	13,956	16,138
Unknown	Rate of Completion	55%	56%	56%	60%	59%	60%	60%	61%	61%	60%	60%	62%

APPENDIX E: STUDENT ENROLLMENT AND COMPLETION BY TYPE OF DISABILITY

Distance Education Student Enrollment and Completion Rate by Type of Disability (Duplicated Headcount)

Disability	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Acquired Brain Injury	Completed	259	262	305	430	537	582	569	565	767	647	760	845
Acquired Brain Injury	Not Completed	232	307	302	341	466	464	412	364	454	499	510	534
Acquired Brain Injury	Total	491	569	607	771	1,003	1,046	981	929	1,221	1,146	1,270	1,379
Acquired Brain Injury	Rate of Completion	53%	46%	50%	56%	54%	56%	58%	61%	63%	56%	60%	61%
Developmentally Delayed Learner	Completed	145	159	203	193	288	460	332	375	397	455	449	514
Developmentally Delayed Learner	Not Completed	271	211	230	233	331	512	325	322	264	346	375	415
Developmentally Delayed Learner	Total	416	370	433	426	619	972	657	697	661	801	824	929
Developmentally Delayed Learner	Rate of Completion	35%	43%	47%	45%	47%	47%	51%	54%	60%	57%	54%	55%
Hearing Impaired	Completed	297	408	443	552	679	816	857	880	987	995	1,118	1,112

Disability	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Hearing Impaired	Not Completed	351	387	420	475	560	584	509	578	602	592	606	667
Hearing Impaired	Total	648	795	863	1,027	1,239	1,400	1,366	1,458	1,589	1,587	1,724	1,779
Hearing Impaired	Rate of Completion	46%	51%	51%	54%	55%	58%	63%	60%	62%	63%	65%	63%
Learning Disabled	Completed	2,167	2,626	3,085	3,829	4,103	4,323	4,069	3,964	4,087	4,418	4,921	7,305
Learning Disabled	Not Completed	2,310	2,740	3,223	3,385	3,468	3,264	2,884	2,592	2,592	2,635	2,868	4,588
Learning Disabled	Total	4,477	5,366	6,308	7,214	7,571	7,587	6,953	6,556	6,679	7,053	7,789	11,893
Learning Disabled	Rate of Completion	48%	49%	49%	53%	54%	57%	59%	60%	61%	63%	63%	61%
Mobility Impaired	Completed	1484	1600	1692	2072	2357	2684	2829	2850	2980	3028	3075	3110
Mobility Impaired	Not Completed	1471	1481	1639	1849	2051	2147	2007	1884	1816	1789	1871	1857
Mobility Impaired	Total	2,955	3,081	3,331	3,921	4,408	4,831	4,836	4,734	4,796	4,817	4,946	4,967
Mobility Impaired	Rate of Completion	50%	52%	51%	53%	53%	56%	58%	60%	62%	63%	62%	63%
Other Disability	Completed	2,048	2,542	3,301	4,103	5,447	7,048	7,738	8,760	9,766	11,340	12,445	8,162
Other Disability	Not Completed	2,290	2,785	3,406	4,109	5,372	6,263	6,073	6,134	6,838	7,483	7,606	4,707

Disability	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Other Disability	Total	4,338	5,327	6,707	8,212	10,819	13,311	13,811	14,894	16,604	18,823	20,051	12,869
Other Disability	Rate of Completion	47%	48%	49%	50%	50%	53%	56%	59%	59%	60%	62%	63%
Psychological Disability	Completed	1,213	1,467	1,774	2,402	3,021	3,788	4,009	4,387	4,807	5,470	6,305	7,376
Psychological Disability	Not Completed	1,428	1,706	2,012	2,423	2,836	3,395	3,364	3,230	3,326	3,670	3,799	4,564
Psychological Disability	Total	2,641	3,173	3,786	4,825	5,857	7,183	7,373	7,617	8,133	9,140	10,104	11,940
Psychological Disability	Rate of Completion	46%	46%	47%	50%	52%	53%	54%	58%	59%	60%	62%	62%
Speech/ Language Impaired	Completed	36	41	66	96	110	118	113	145	152	178	234	107
Speech/ Language Impaired	Not Completed	29	50	76	83	103	105	104	100	112	130	126	52
Speech/ Language Impaired	Total	65	91	142	179	213	223	217	245	264	308	360	159
Speech/ Language Impaired	Rate of Completion	55%	45%	46%	54%	52%	53%	52%	59%	58%	58%	65%	67%
Visually Impaired	Completed	275	267	319	410	480	589	574	591	678	618	785	1,173

Disability	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Visually Impaired	Not Completed	277	256	343	367	430	431	393	347	402	400	451	498
Visually Impaired	Total	552	523	662	777	910	1,020	967	938	1,080	1,018	1,236	1,671
Visually Impaired	Rate of Completion	50%	51%	48%	53%	53%	58%	59%	63%	63%	61%	64%	70%

APPENDIX F: DISTANCE EDUCATION COURSES BY DELIVERY METHOD

Number of Distance Education Course Sessions by Delivery Method 2005 to 2017

Data Element	Description from Data Element Dictionary	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
#50	Asynchronous: (e.g. various types of instructional software, computer assisted instruction (CAI); digitized visual, audio or text selected in response to student input; or specially structured audio tapes, web enhanced television, etc.)	969	809	1,797	1,973	1,335	1,105	926	932	1,076	1,122	1,201	1,307
#51	Televised Synchronous: Two-way interactive video and audio (e.g. videoconference)	428	398	565	527	900	955	741	817	755	755	780	872
#52	Televised Synchronous: One-way interactive video and two-way interactive audio	169	185	194	153	159	177	116	70	85	69	66	21
#54	Synchronous: Other simultaneous interactive medium	124	167	191	216	193	155	0	2	2	1	1	1
#61	Asynchronous: Text one-way (e.g. newspaper, correspondence, web page, etc.)	833	908	1,054	880	712	611	476	513	509	671	941	849

Data Element	Description from Data Element Dictionary	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
#62	Asynchronous: Audio one-way (e.g. audio cassette, radio, etc.)	17	13	8	8	6	6	2	3	4	3	3	3
#63	Televised Asynchronous: Video one-way (e.g. ITV, video cassette, etc.)	2,361	2,137	1,705	1,452	1,070	559	409	307	312	312	312	327
#64	Asynchronous: Other one-way passive medium	153	166	273	307	3	2	0	0	0	32	10	9
#71	Internet Synchronous: Session under supervision of instructor not available by line of sight using the Internet with immediate opportunity for exchange between participants.	1,514	1,917	2,178	2,166	2,131	3,339	3,167	3,042	3,467	3,794	3,976	4,078
#72	Internet Asynchronous: Session under supervision of instructor not available by line of sight using the Internet without the immediate involvement of the instructor.	14,846	19,434	24,449	31,562	33,529	36,756	35,517	36,461	41,984	45,821	50,593	55,767

APPENDIX G: DISTANCE EDUCATION PROGRAMS 100% ONLINE

These programs were reported by colleges in the 2014-16 Institutional Distance Education Survey as 100 percent online.

Allan Hancock College			
Accounting	AS	Leadership in Action: Organizational Learning	Certificate
Business	AS	Leadership in Action: Organizational Variation	Certificate
Business	Certificate	Management	AA
English	AA	Management	Certificate
Fire Technology	AS	Payroll Practitioner	Certificate
Global Studies	AA	Project Management	Certificate
Psychology	AA	Retail Management (WAFC)	Certificate
Social Science	AA	Small Business Management	AA
Spanish	AA	The Individual and Society	AA
American River College		Barstow Community College	
Accounting Clerk	Certificate	Accounting	AS
Activity Coordinator Certification	Certificate	Accounting	Certificate
Business Administration	AS	Administration of Justice	AS
Computer Applications for Small Business	Certificate	Administration of Justice	Certificate
Entrepreneurship	Certificate	Business Management	AS
General Business	AA	Business Management	Certificate
General Business — Introduction	Certificate	Child Development/Early Care and Education	AS
General Science	AS	Child Development/Early Care and Education	Certificate
Green Building and Sustainable Design for Interiors	Certificate	Humanities	AA
History of the Creative Arts	AA	Social Sciences, General	AA
Internet Marketing	Certificate		

Cabrillo College

Accounting	AS
Business	AS
Computer Networking and System Administration	AS
Computer Networking and System Administration	Certificate
Criminal Justice, Law Enforcement Option	AS
Liberal Arts & Science	AA
Liberal Arts & Science	AS

Cañada College

Anthropology	AS
Economics	AS
History	AA
Interdisciplinary Studies: Natural Science and Mathematics	AS
Interdisciplinary Studies: Social and Behavioral Sciences	AA
Political Science	Unknown
Psychology	AA

Cerro Coso Community College

Administration of Justice	AS-T
Anthropology AA-T	AA-T
Anthropology AA-T	AA-T
Art History AA-T	AA-T
BSOT Administrative Office Assistant Certificate	Certificate
BSOT Office Clerk Certificate	Certificate
Business Administration	AS-T

Business	AS
Business	Certificate
Business Office Technology	AS
Business Office Technology	Certificate
Child Development Associate Teacher	Certificate
Child Development Master Teacher	Certificate
Child Development Site Supervisor	Certificate
Child Development Teacher	Certificate
Computer Information Systems	AS
Computer Information Systems	Certificate
Cyber Security Technician	Certificate
Cyber Security Technology	AS
Data Analyst I	Certificate
Early Childhood Education	AS-T
English	AA-T
Information Technology Plus	Certificate
Liberal Arts: Arts and Humanities	AA
Liberal Arts: Social and Behavioral Sciences	AA
Management	AS
Management	Certificate
Mathematics	AS-T
Medical Assisting: Administrative Medical Assisting	Certificate
Paralegal Studies	AS
Paralegal Studies	Certificate
Psychology AA-T	AA-T
Web Fundamentals	Certificate

Web Professional	AS-T
Web Professional	Certificate

Citrus College

Accounting	Unknown
Administration of Justice	Unknown
Administrative Office Occupations	Unknown
Business	Unknown
Business Administration	Unknown
Fine and Performing Arts	Unknown
History	Unknown
Language Arts	Unknown
Social and Behavioral Sciences	Unknown
Sociology	Unknown
Writing Competency	Certificate

City College of San Francisco

CNIT: Cisco Networking	AS
CNIT: Network Security	AS
Community Health Worker	Certificate
Computer Program: Java	Certificate
Computing Skills for Science	Certificate
CSU GE Certification	Certificate
General Business	Certificate
Health Education	AS
IGETC-CSU Certification	Certificate
Liberal Arts: Arts and Humanities	AA
Liberal Arts: Communications	AA
Liberal Arts: Social & Behavior	AS
Network Security	Certificate

Post-Prison Health Worker	Certificate
Speech Communication	Certificate
Web Application Program	Certificate
Web Site Development Tech	Certificate

Coastline Community College

Accounting	Certificate
American Studies	AA
Art	AA
Arts & Humanities	AA
Business	Certificate
Business Administration	AS
Business Management	AA
Communications	AA
Economics	AA
Emergency Management / Homeland Security	AS
English	AA
Gerontology	AA
Gerontology	Certificate
History	AA
Human Services	AA
Liberal Studies (Teacher Prep)	AA
Management	Certificate
Mathematics	AA
Office Support Specialist	Certificate
Physical Education & Health	AA
Process Technology	Certificate
Psychology	AA

Science and Math	AA
Social and Behavioral Sciences	AA
Sociology	AA

College of the Canyons

Anthropology	AA
Business	AA
History	AA
Psychology	AA
Sociology	AA

College of the Siskiyou

English	AA
History	AA
Humanities	AA
LAS Humanities Emphasis	AA
LAS Multicultural Emphasis	AA
LAS Social Science Emphasis	AA
Social Science	AA

Cuesta

Library/Information Technology	AS
Library/Information Technology	Certificate

Cuyamaca College

Business — Data Management	Certificate
Business — General	Certificate
Business Office Technology — Executive Assistant	Certificate
Computer and Information Science — Networking, Security and System Administration	Certificate

Computer and Information Science — Web Development	Certificate
Entrepreneurship — Small Business Management	Certificate

De Anza

Business Administration	Certificate
Entrepreneurship	Certificate
Network Basics	Certificate

Diablo Valley College

Accounting	AS
Administration of Justice	AA
Administration of Justice	Certificate
Advanced Accounting	Certificate
Advanced General Business	Certificate
Bookkeeping	Certificate
Business	AS
Business for Transfer	AS-T
Business Marketing	Certificate
Computer Information Systems	AS
Computer Information Systems — Core	Certificate
Computer Information Systems — Database Management	Certificate
Computer Information Systems — Project Management	Certificate
Computer Information Systems — Web Graphics	Certificate
Computer Information Systems — Web Technology	Certificate
Computer Science	AS

Computer Science — Advanced C++ Programming	Certificate
Computer Science — Computer User Support	Certificate
Computer Science — Mobile and Enterprise Java Programming	Certificate
Computer Science — Program Design	Certificate
General Accounting	Certificate
General Business	Certificate
Geography	AA
History	AA
Management & Leadership Studies	Certificate
Office professional	Certificate
Real Estate	Certificate
Small Business Management	Certificate
Sociology	AA
Wealth Management	Certificate

El Camino College

Anthropology	AA
Child Development	AA
General Studies	AA
History	AA
Philosophy	AA
Political Science	AA

El Camino College Compton Center

*(At the time of the survey,
Compton was still a center.)*

Administration of Justice	AA
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Anthropology	AA
Child Development	AS
Child Development	Certificate
History	AA
Philosophy	AA
Political Science	AA

Foothill College

Accounting	AA
Accounting	Certificate
Anthropology	AA
Art History	AA
Art History	Certificate
Business Administration	AA
CPA Examination Preparation	Certificate
Economics	AA
English	AA
General Studies/Social Science	AA
Graphic & Interactive Design	Certificate
Graphic Design & Interactive Design	AA
History	AA
Humanities	AA
Music Technology	Certificate
Music: General	AA
Music: Technology	AA
Pro Tools	Certificate
Psychology	AA
Sociology	AA

Hartnell College

Administration of Justice AS

Lake Tahoe Community College

Anthropology AA

Business Accounting Certificate

Business: Accounting AA

Business: Finance AA

Business: General AA

Criminal Justice AA

Criminal Justice Certificate

Humanities AA

Liberal Arts: Arts & Humanities AA

Liberal Arts: Social Sciences AA

Sociology AA

Las Positas

Liberal Arts & Sciences AA

Sociology AA-T

Lassen Community College

Child Development Certificate

Child Development AA

Early Childhood Education AS-T

General Studies Emphasis
in Social Science AA**Los Angeles Harbor College**

Administration of Justice AS

Business AS

Fire Technology AS

Los Medanos College

Travel Marketing AS

Travel Marketing Certificate

Merced College

International Studies AA

Social and Behavioral Sciences AA

Mira Costa College

Administrative Professional AA

Administrative Professional Certificate

Bookkeeping AA

Bookkeeping Certificate

Child Development
Associate Teacher AAChild Development
Associate Teacher CertificateComputer Applications
Professional for Business AAComputer Applications
Professional for Business Certificate

E-Commerce Certificate

History for Transfer AA-T

Hospitality Management AA

Hospitality Management Certificate

Liberal Arts with an Area of
Emphasis in Arts and Humanities AALiberal Arts with an Area of
Emphasis in Business
and Technology AALiberal Arts with an Area of
Emphasis in Creative
and Applied Arts AA

Liberal Arts with an Area of Emphasis in Mathematics and Sciences	AA
Liberal Arts with an Area of Emphasis in Multicultural Studies	AA
Liberal Arts with an Area of Emphasis in Social and Behavioral Sciences	AA
Medical Office Professional	AA
Medical Office Professional	Certificate
Network and Desktop Systems Administration	AA
Network and Desktop Systems Administration	Certificate

Modesto Junior College

Administration of Justice	AS
General Studies, Emphasis in Humanities	AA
General Studies, Emphasis in Social and Behavioral Sciences	AA

Moorpark College

Biotechnology	AS
Criminal Justice	AS
Game Design	AS
Journalism	AA
Psychology	AA
Sociology	AA

Mt. San Antonio College

CIS Professional Certificate in C++ Programming	Certificate
CIS Professional Certificate in Database Management Microcomputers	Certificate

CIS Professional Certificate in Java Programming	Certificate
CIS Professional Certificate in Networking	Certificate
CIS Professional Certificate in Object-Oriented Design & Programming	Certificate
CIS Professional Certificate in SQL Server	Certificate
CIS Professional Certificate in Telecommunications	Certificate
CIS Professional Certificate in Visual Basic Programming	Certificate
CIS Professional Certificate in Web Programming	Certificate

CIS Professional Certificate in Windows Operating System Administration	Certificate
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Hospitality: Hospitality Management Level I	Certificate
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Hospitality: Hospitality Management Level II	Certificate
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Hospitality: Restaurant Management Level I	Certificate
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Information and Operating Systems Security	Certificate
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Introduction to Computer Information Technology	Certificate
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Programming in C++	Certificate
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Programming in Visual Basic	Certificate
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Ohlone College

CCNA	Certificate
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Cybersecurity	Certificate
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Fine Arts	AA
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GIS	Certificate	Business for Transfer	AS-T
Liberal Arts — Humanities	AA	Business Marketing	Certificate
Liberal Arts — Languages	AA	Business Marketing	AS
Linux (LPI)	Certificate	Corrections	AS
Linux/Unix	Certificate	English and Literature	AA
Real Estate Broker Associate	Certificate	English for Transfer	AA-T
Real Estate Sales Associate	Certificate	Fire Technology	Certificate
Social Sciences	AS	Fire Technology	AS

Palomar College

Accounting	Certificate
Administrative Assistant	Certificate
American Indian Studies	Certificate
Business — General	AS
Computer Information Systems	Unknown
Computer Science	Certificate
Computer Science with Emphasis in Video Gaming	Certificate
Information Technology	Unknown
Library and Information Technology	Certificate
Public Works Management — Level II	Certificate
Real Estate Broker License Preparation	AS

Rio Hondo College

Administration of Justice for Transfer	AS-T
Anthropology for Transfer	AA-T
Administration of Justice	AS
Business Administration	AA

General Studies with Emphasis in Arts and Human Expression	AA
General Studies with Emphasis in Science and Math	AS
General Studies with Emphasis in Social Behavior and Self Development	AA
General Studies with Emphasis in Social Sciences	AA
International Business	Certificate
Management and Supervision	Certificate
Management and Supervision	AS
Philosophy	AA
Preschool teacher	Certificate
Spanish for Transfer	AA-T

Saddleback College

HIT	Certificate
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San Bernardino Valley College

Administration of Justice	AA
Administration of Justice	Certificate
Anthropology	AA
Business Administration	AS

Computer Science	Certificate	Administrative Assistant	Certificate
Corrections	Certificate	Business Administration	Certificate
Liberal Arts	AA	Business Management	Certificate
Library Technician	Certificate	Computer & Information Science	Certificate
Philosophy	AA	Liberal Arts: Anthropology	AA
Sociology	AA	Liberal Arts: Business Studies	AA
Water Distribution	Certificate	Liberal Arts: Child Development	AA
Water Treatment	Certificate	Liberal Arts: Economics	AA

San Diego City College

Computer Information Systems	Certificate
Electrical Apprenticeship	Certificate
Liberal Arts: Elementary Teaching Preparation	AA
Liberal Arts: Language Arts & Humanities	AA
Liberal Arts: Scientific Studies Biological Sciences	AA
Liberal Arts: Scientific Studies Mathematics & Pre-Engineering	AA
Liberal Arts: Scientific Studies Physical & Earth Sciences	AA
Liberal Arts: Social & Behavioral Sciences, Sociology Emphasis	AA
Liberal Arts: Visual & Performing Arts	AA
Real Estate Broker	Certificate
Sheet Metal Apprenticeship	Certificate
Sheet Metal Trade Option (non-apprentice)	Certificate

San Diego Mesa

Accounting	Certificate
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Liberal Arts: Psychology	AA
Liberal Arts: Sociology	AA
Multimedia	Certificate
Web Design	Certificate

San Diego Miramar

Accountancy	AS
Accountancy	Certificate
Administration of Justice for Transfer	AS-T
Administrative Assistant	AS
Administrative Assistant	Certificate
Art/Visual Studies	AA
Aviation Business Administration	AS
Aviation Operations Management	Certificate
Business Administration	AS
Business Administration	Certificate
Business Management	AS
Business Management	Certificate
Computer & Information Science	Certificate
Computer & Information Sciences	AS

Health & Physical Education Studies	AS	Engineering Drafting and Design Degree Option II — Architectural/Civil Engineering/Construction Drafting and Design Degree	AA
History for Transfer	AA-T		
Human Development Studies	AA		
Law Enforcement Specialization	AS	Engineering Draft Design Certificate	
Law Enforcement Specialization	Certificate	Option II — Architectural Civil Engineering Construction Drafting and Design	Certificate
Mortgage Brokerage & Banking	AS		
Mortgage Brokerage & Banking	Certificate	General Accounting	Certificate
Occupational/Technical Studies	AS	International Business	Certificate
Paralegal	AS	International Business Degree	AA
Paralegal	Certificate	Liberal Arts — Arts, Humanities & Communications (Online Degree Pathway)	AA
Psychology	AA		
Social & Behavioral Studies	AA	Liberal Arts Degree American Studies	AA
San Joaquin Delta College			
Accounting	Certificate	Liberal Arts Degree — Arts, Humanities & Communications	AA
Basic Business	Certificate		
Supervision and Management	Certificate	Liberal Arts Degree Business and Technology	AA
Santa Ana College			
Accounting	AA	Liberal Arts Degree Kinesiology and Wellness	AA
Computerized Accounting — QuickBooks	Certificate	Liberal Arts Degree Mathematics and Science	AA
Computerized Bookkeeping — QuickBooks	Certificate	Liberal Arts Degree Social and Behavior Sciences	AA
Contemporary Marketing Degree	AA	Library Technology Degree	AA
Digital Publishing Certificate	Certificate	Management	Certificate
Energy Analysis Degree	AA	Management Degree	AA
Engineering Computer-Aided Drafting and Design	Certificate	Modern Languages Degree	AA
Engineering Computer-Aided Drafting and Design Degree	AA	Option 1 Anthropology Degree	AA
		Option 1 Business Administration Degree	AS

Option 1 Economics Degree	AA	Global Studies	AA
Option 1 Kinesiology Degree	AA	Health Information Technology	AS
Option 1 Psychology Degree	AA	International Business	AA
Option 2 Associate in Arts in Psychology for Transfer	AA-T	International Business	Certificate
Option 2 Associate in Arts in Spanish for Transfer	AA-T	Introduction to Graphic Design	Certificate
Option 2 Associate in Science in Business Administration for Transfer (Online Degree Pathway)	AS-T	Liberal Arts & Sciences: Art & Humanities Emphasis	AA
Retail Management	Certificate	Liberal Arts & Sciences: Science & Math Emphasis	AA
Retail Management Degree	AA	Liberal Arts & Sciences: Social & Behavior Science Emphasis	AA
Santa Barbara Community College		Marketing	AA
Administration of Justice for Transfer	AS-T	Marketing	Certificate
Administration of Justice: Legal Studies Emphasis	AS	Medical Coding Specialist	Certificate
Administration of Justice: Legal Studies Emphasis	Certificate	Natural History	AA
Anthropology	AA	Political Science for Transfer	AA-T
Applied Photography	AA	Spanish for Transfer	AA-T
Applied Photography	Certificate	Santa Rosa Junior College	
Cancer Information Management	AS	Administration of Justice for Transfer Major (AS-T)	AS-T
Cancer Information Management	Certificate	Anthropology for Transfer Major	AA-T
Communication: Communication Science Emphasis	AA	Business Admin. for Transfer Major	AS-T
Computer Information Systems	AS	Business: Real Estate	Certificate
Computer Information Systems: Emphasis in System Administration	AS	Business: Real Estate Major	AA
Film and Media Studies	AA	Business: Real Estate Sales	Certificate
GDP: Graphic Design Concentration	AA	Computer Studies: Adobe Applications Specialist	Certificate
		Computer Studies: Adobe Certification Training in InDesign	Certificate
		Computer Studies: Microsoft Office Specialist	Certificate

Computer Studies: Web Programmer	Certificate
French Major	AA
History for Transfer Major	AA-T
Humanities Major	AA
Latin American Studies Major	AA
Natural Sciences Major	AS
Religious Studies Major	AA
Sociology for Transfer Major	AA-T
Spanish for Transfer Major	AA-T
Spanish Major	AA-T

Santiago Canyon College

Entrepreneurship	Certificate
Real Estate	Certificate

Sierra College

Virtual Office	
Professional Administrative	Certificate

Solano Community College

Business, General (Transfer)	Certificate
University Studies — Arts and Humanities	AA
University Studies — Liberal Studies	AA
University Studies — Science & Quantitative Reasoning	AA
University Studies — Social Science	AA

Taft College

Administration of Justice	AS
Administrative Services	AS

Administrative Services	Certificate
Administrative Services I	Certificate
Administrative Services II	Certificate
Assistant Teacher	Certificate
Associate Teacher in Early Care, Education, and Family Studies	Certificate
Business Administration	AA
Business Administration	AS
Criminal Justice Administration	AS
Criminal Justice Administration: Corrections	AS
Criminal Justice Administration: Corrections	Certificate
Direct Support Education	AS
Direct Support Education	Certificate
Early Care, Education & Family Studies	AS
Early Care, Education & Family Studies	Certificate
Early Childhood Education	AS
Early Intervention Assistant I	Certificate
English	AA
General Business	AS
History	AA
Liberal Arts: Arts and Humanities	AA
Liberal Arts: Business and Technology	AA
Liberal Arts: Communications	AA
Liberal Arts: Math and Science	AA
Liberal Arts: Social and Behavioral Sciences	AA

Management	AS
Management	Certificate
Management Customer Service	Certificate
Master Teacher in Early Care Education & Family Studies	Certificate
Master Teacher: Special Needs	Certificate
Mathematics	AA
Microsoft Office Applications	Certificate
Teacher in Early Care, Education and Family Studies	Certificate

West Hills College Coalinga

Administration of Justice	AS
Administration of Justice — Correctional Science	AS
Child Development — School Age	Certificate
Computer Information Systems	AS
Computer Information Systems	Certificate
Liberal Arts — Arts & Humanities	AA
Liberal Arts — Math & Science	AA
Liberal Arts — Social & Behavioral Sciences	AA
Political Science	AA

West Hills College Lemoore

Administration of Justice — Law Enforcement	AA
Liberal Arts with Emphasis in Arts and Humanities	AA
Liberal Arts with Emphasis in Social Sciences	AA
Psychology	AA

West Valley College

Administration of Justice, Law Enforcement	AA
Administrative Management	Certificate
Anthropology	AA
Business Administration	AS
Business Administration	Certificate
Business Communication	Certificate
Business Leadership Skills	Certificate
Business Management	Certificate
Communication and the Arts Specialization	Certificate
Economics	AA
Geography	AA
Graphic Design	Certificate
Human Relations in Business	Certificate
Liberal Arts Non-Transfer: Cultural & Global Studies	AA
Liberal Arts Non-Transfer: Science & Math	AA
Liberal Arts Non-Transfer: Social & Behavioral Science	AA
Liberal Arts Non-Transfer: Arts & Humanities	AA
Liberal Arts Non-Transfer: Communication & Media	AA
Liberal Arts Transfer: Arts & Humanities	AA-T
Liberal Arts Transfer: Communication & Media	AA-T
Liberal Arts Transfer: Cultural & Global Studies	AA-T

Liberal Arts Transfer: Science & Math AA-T

Liberal Arts Transfer: Social
& Behavioral Science AA-T

Marketing Certificate

Marketing/Digital Communications Certificate

Retail Management

Social Science

Sociology

Web & Mobile Design

Web and Mobile Design

Certificate

AA

AA

Certificate

AA

APPENDIX H: COMMON METHODS OF FACULTY-STUDENT INTERACTIONS

Summary of Methods of How Distance Education Faculty Interact with Distance Education Students

This question addresses the most commonly used methods of interacting with students by faculty. On a scale of 1 to 5, with 5 being the most common use, what methods of communications do you believe DE faculty use the most when interacting with their distance education students?

Method of Interaction	1 — Least Common	→2	→3	→4	5 — Most Common
Meeting face-to-face on campus	24%	31%	38%	5%	2%
Telephone meetings (either one on one or group conference calls)	29%	37%	25%	5%	4%
E-mailing	1%	1%	4%	11%	83%
Text messaging via cell phone	26%	38%	28%	8%	1%
Faculty blog	46%	34%	14%	5%	1%
Online discussion board	1%	1%	4%	8%	86%
Class chat room	8%	20%	39%	21%	12%
Video conferencing with students (Skype, Google Hangout, FaceTime, etc.)	10%	34%	38%	17%	2%
Class Facebook page	55%	33%	10%	2%	0%
Class Twitter feed	54%	39%	7%	0%	0%
Other social networking sites	55%	38%	6%	0%	0%

Method of Interaction	1 — Least Common	→2	→3	→4	5 — Most Common
Mailing materials to students (public/private postal services)	89%	7%	1%	2%	1%
Faxing materials to/from students	94%	4%	2%	0%	0%
Telephone conferencing (e.g., CCC Confer)	37%	33%	21%	7%	3%
Telephone/computer conferencing (e.g., CCC Meet and Confer)	25%	38%	23%	10%	4%
Telephone/computer conferencing for teaching (e.g., CCC Teach and Confer)	35%	30%	20%	13%	3%
Telephone/computer conferencing for meeting with students (e.g., CCC Confer Office Hours)	24%	32%	25%	15%	3%
Course Management System (CMS)	0%	0%	4%	2%	95%

APPENDIX I: STUDENT SERVICES AVAILABLE

Student Services Available Via the Internet, Telephone or on Campus

Student Service	Not offered	Service or program is offered only on campus	On campus service described on static web pages	Some of this service is provided via interactive web pages (no records kept)	Some of this service is offered via phone or live chat	Some of this service is offered using video conferencing (workshops, appointments or drop-ins)	Some of this service allows students to complete transaction without coming to campus	An online record of this service is saved by the institution and can be accessed by students	An online record of this services is saved and can be edited by students
Academic Advising and Counseling	0%	17%	57%	39%	68%	42%	57%	22%	5%
Admissions	0%	4%	61%	29%	50%	9%	72%	62%	37%
Bookstore Services	0%	17%	63%	50%	34%	6%	65%	39%	21%
Career Counseling & Placement Services	1%	37%	62%	31%	42%	24%	46%	13%	3%
College Facilitated Peer to Peer Social Media (Facebook, Twitter)	39%	2%	28%	25%	5%	2%	31%	13%	12%
College to Student Communications	0%	6%	51%	41%	48%	24%	57%	43%	16%
Cooperative Agencies Resources for Education Program (CARE)	8%	47%	64%	20%	41%	16%	23%	10%	4%
Counseling (Personal)	8%	56%	44%	15%	32%	19%	18%	5%	0%
Course/Program Catalog	0%	2%	68%	27%	16%	5%	36%	37%	3%
Disabled Student Programs and Services (DSPS)	0%	46%	71%	28%	55%	24%	42%	11%	7%
Disabled Student Services	0%	42%	71%	28%	58%	23%	40%	13%	6%

Student Service	Not offered	Service or program is offered only on campus	On campus service described on static web pages	Some of this service is provided via interactive web pages (no records kept)	Some of this service is offered via phone or live chat	Some of this service is offered using video conferencing (workshops, appointments or drop-ins)	Some of this service allows students to complete transaction without coming to campus	An online record of this service is saved by the institution and can be accessed by students	An online record of this services is saved and can be edited by students
Early Alert System	13%	12%	35%	27%	31%	12%	41%	24%	8%
Education Planning	0%	19%	54%	32%	49%	32%	54%	35%	22%
Emergency Calls to Cellular Telephone	15%	17%	29%	8%	40%	1%	35%	16%	9%
Emergency Calls to Landline Telephone	14%	22%	29%	8%	37%	1%	33%	13%	10%
Emergency Text Message to Cellular Telephone	4%	16%	37%	11%	41%	1%	39%	18%	14%
E-Portfolios	70%	4%	9%	9%	4%	3%	16%	8%	13%
Ethical & Legal Services (Ombudsman)	51%	23%	26%	5%	10%	2%	13%	3%	0%
Extended Opportunity Programs and Services (EOPS)	1%	48%	72%	25%	51%	22%	32%	11%	5%
Faculty to Student Communications	1%	7%	34%	32%	50%	38%	59%	36%	18%
Financial Aid (General Information)	2%	10%	74%	35%	57%	28%	55%	37%	16%
Financial Aid Application	1%	9%	64%	30%	28%	19%	60%	45%	39%
Financial Aid Award Notification	3%	6%	50%	25%	21%	7%	62%	57%	14%
Financial Planning (Budgeting, Banking, Loan & Credit Card Management)	28%	21%	37%	22%	15%	18%	23%	12%	7%
Foster and Kinship Care (FKCE)	28%	46%	38%	12%	24%	11%	13%	5%	1%
Foster Student Success Initiative (FYSI)	38%	39%	31%	10%	21%	8%	9%	3%	1%

Student Service	Not offered	Service or program is offered only on campus	On campus service described on static web pages	Some of this service is provided via interactive web pages (no records kept)	Some of this service is offered via phone or live chat	Some of this service is offered using video conferencing (workshops, appointments or drop-ins)	Some of this service allows students to complete transaction without coming to campus	An online record of this service is saved by the institution and can be accessed by students	An online record of this services is saved and can be edited by students
Health and Wellness Services	9%	62%	60%	15%	19%	8%	10%	3%	0%
Job Placement	17%	33%	52%	24%	27%	13%	29%	11%	2%
Library Services	0%	12%	67%	57%	58%	25%	73%	36%	20%
Mathematics, Engineering, Science Achievement (MESA)	54%	28%	30%	11%	12%	6%	13%	5%	2%
Orientation to College	0%	11%	57%	49%	20%	27%	61%	40%	8%
Orientation to Online Learning	5%	6%	48%	44%	19%	16%	48%	27%	10%
Other Remediation Services (Name)	44%	25%	26%	16%	16%	13%	17%	0%	3%
Other Retention Services (Name)	61%	19%	19%	5%	13%	5%	11%	5%	0%
Peer to Peer Mentoring	37%	38%	19%	8%	16%	5%	15%	7%	1%
Placement Testing	1%	66%	49%	13%	8%	2%	21%	19%	2%
Prior Learning Assessment	21%	43%	35%	14%	15%	6%	16%	12%	1%
Registration	0%	4%	56%	38%	38%	7%	68%	66%	62%
Schedule of Classes	0%	2%	58%	50%	18%	9%	42%	47%	14%
Self-Service Tutorials (Writing, Researching, Study Skills, Time Management, Procrastination, etc.)	10%	17%	60%	46%	18%	19%	52%	14%	8%
Services for First Generation College Students	7%	52%	56%	31%	38%	21%	31%	10%	2%

Student Service	Not offered	Service or program is offered only on campus	On campus service described on static web pages	Some of this service is provided via interactive web pages (no records kept)	Some of this service is offered via phone or live chat	Some of this service is offered using video conferencing (workshops, appointments or drop-ins)	Some of this service allows students to complete transaction without coming to campus	An online record of this service is saved by the institution and can be accessed by students	An online record of this services is saved and can be edited by students
Services for Low Income Students	2%	50%	63%	28%	37%	18%	32%	10%	3%
Services for Students of Color	13%	44%	55%	24%	34%	18%	27%	8%	2%
Services for Students Taking Basic Skills Courses	5%	45%	59%	30%	37%	17%	33%	9%	5%
Services for Veterans	1%	49%	67%	26%	47%	20%	37%	12%	3%
Student Accounts	3%	5%	43%	38%	31%	9%	58%	58%	44%
Student Activities (Recreation, Leadership, Academics, Religion & Spirituality)	1%	63%	60%	18%	16%	8%	15%	3%	1%
Student Population Segments Services (International, Alumni, etc.)	17%	33%	56%	17%	37%	13%	30%	5%	3%
Student to Student Communications	31%	13%	22%	18%	14%	8%	34%	16%	17%
Technical Support (Help Desk, FAQs, Tutorials, LMS Guide)	0%	12%	68%	45%	64%	26%	66%	23%	10%
Test Proctoring	13%	53%	38%	13%	6%	4%	27%	6%	1%
Transcript Ordering/Payment	0%	6%	55%	36%	37%	9%	62%	56%	24%
Transfer Planning	0%	27%	62%	34%	55%	30%	44%	16%	7%
Tutoring (Individual & Group)	1%	19%	61%	39%	39%	32%	61%	34%	19%
Work Opportunity and Responsibility to Kids (CalWORKS)	2%	50%	67%	25%	47%	15%	28%	12%	5%

Front cover photo: West Hills College Coalinga students.

Photo at right: Three Skyline College students.

Back cover photo: A group of Cañada College students.



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WEBSITES

California Community Colleges

CaliforniaCommunityColleges.cccco.edu

Student Success Scorecard

scorecard.cccco.edu

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salarysurfer.cccco.edu

Associate Degree for Transfer

adegreewithaguarantee.com

Priority Registration

stepforward.cccco.edu

Workforce & Economic Development

doingwhatmatters.cccco.edu

Financial Aid

icanaffordcollege.com

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