Distance Education Report

California Community Colleges Chancellor's Office
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Prepared by the Academic Affairs Division
and the Office of Communications

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California Community Colleges
Chancellor's Office

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Distance Education
Introduction

The California Community Colleges serve more than 2.76 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 (DE).

Distance education focuses on the design of pedagogy, technology and instructional systems for students who are not physically present in the same location with the instructor. Title 5, section 55200, defines distance education as "instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology."

Distance education creates an educational experience of equal qualitative value as a face-to-face course for the learner to best suit his or her needs in an increasingly demanding culture challenged by the traditional face-to-face classroom delivery mode. The California Community College 2010 "W" Student Survey data indicates that convenience is the number one reason why students take a course.

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The first distance education report by the Chancellor's Office was issued in January 2002. It recognized the extent to which DE was offered in the community colleges and covered 1995-2000. Every two years, this report is updated to include data from the prior two fiscal years. The September 1, 2009 report submitted to the board of governors covered the development of DE through 2007-08. These reports are prepared in response to the BOG Procedure and Standing Order 409(b).

This report*, Distance Education,* adds DE enrollment and completion rates for fiscal years 2008/09 and 2009/10. It also provides demographic data pertaining to the age, ethnicity, gender and disabilities of students enrolled in DE courses. In addition, it looks at issues impacting DE course development and support, student authentication and academic integrity, programs and partnerships, cost factors and policy issues raised by a report on DE in public higher education in California by the Legislative Analyst's Office (published in October 2010).

Distance Education
Background

From 1979 to 1994, the California Community Colleges provided students DE opportunities that were limited to courses transferable to baccalaureate institutions. In 1994, due to the growing demand for distance education courses, new temporary regulations creating a pilot period of seven years were adopted.

In 1995/96 DE course sessions represented only 0.63 percent of all course sessions; today they have grown to represent 9.06 percent of all course sessions. They were established to allow the community colleges to explore and develop educational initiatives. Using advanced communication and computing technologies, they addressed student access issues related to geographical, cultural, or facility barriers. To help provide advice in this expanded instructional delivery method, the board of governors also established a distance education technical advisory committee to evaluate the status of DE in the system.

In January 2002 the report, *A Seven Year Study of Distance Education in the California Community Colleges: 1994-2001*, was presented to the board and summarized the system's activities during this pilot period and focused on issues that were needed to support DE throughout the community colleges. The report also included information about student access, enrollment, course completion, and student and faculty satisfaction with this instructional delivery mode.

Courses, Sections, and Sessions

Since all enrollment data are derived from the COMIS, this report contains enrollment data reported by Data Element Dictionary (DED) codes. For purposes of this report a distinction needs to be made between a course, course section, and course session. The DED definitions are as follows:

- A **course** is a unique offering by a college, which has a unique course outline that has been 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 being 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 DED.

  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.

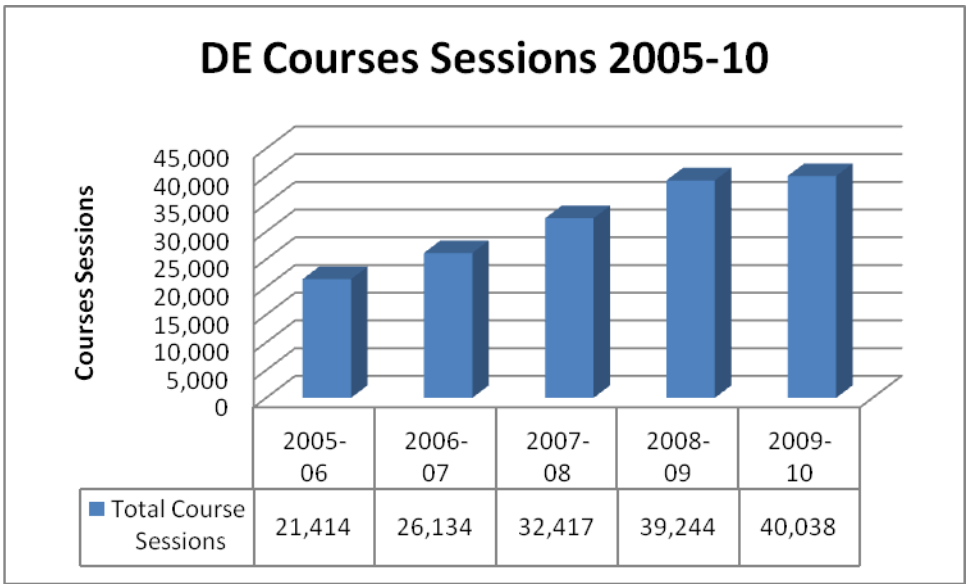
In March 2002, the board of governors approved title 5 regulations to expand DE to credit non-transferable and noncredit courses. The board also directed continuance of the review and collection of DE data that began in 1994. These data, updated every two years, report on student access and success in all DE courses by the age, ethnicity, gender and type of disability of the students enrolled.

The 2002 regulatory changes also allow DE courses to be considered as equivalent to a regular course rather than solely as independent study for the purposes of computing full-time equivalent student (FTES) apportionment.

Regulations regarding the standards and criteria for DE courses were revised in collaboration with the renamed Educational Technology Advisory Committee and Chancellor's Office staff, and were approved by the board of governors in July 2007. In 2007, the regulations specifically addressed instructor contact and separate course approval. Regulations regarding DE attendance accounting standards for labs and noncredit were also revised and approved by the board in June 2008.

Graph 1 compares the growth of DE sessions during the five-year period covered in this report. All COMIS data in this report is derived from DE course sessions. 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 throughout the system.

Graph 1



DE continues to grow to include more academic programs being developed, more course sessions being taught, more students selecting this instructional delivery method, and more online student services being made available to all students.

In addition, new issues related to student retention and success, student authentication, and academic integrity continue to grow. The passage of the Federal Higher Education Opportunity Act of 2008 places new responsibilities on regional accrediting commissions to assure that colleges are providing quality distance education instructional services for students.

Distance Education
Methodology

Data referenced in this report came from a variety of sources:

COMIS

The Chancellor's Office Management Information System (COMIS) was implemented in 1990 and 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 at the end of each term.

TWO DISTANCE EDUCATION SURVEYS: Students and Programs

In January 2011 the Chancellor's Office sent The California Community Colleges Chancellor's Office Distance Education "W" Survey for Fall 2010 to 50,000 students who dropped a DE course in the Fall 2010 term with a "W." The survey asked for the reasons they took the course and why they dropped it. This survey is hereinafter referred to as The Chancellor's Office 2010 "W" Student Survey.

In the spring of 2011 the Chancellor's Office sent The California Community Colleges Chancellor's Office 2010-11 Survey of Colleges' Distance Education Programs and Services to all 112 campus DE coordinators to gather information about a variety of DE programs and services including degrees and certificates, student authentication, and DE course development and support. This survey is hereinafter referred to as The Chancellor's Office 2011 DE Program Survey.

Distance Education
Key Findings

This report highlights the California Community Colleges' growth of both DE courses and student enrollment, the process of course development, accreditation policy modifications related to distance education, successful completion and retention rates, student authentication, academic integrity, programs and partnerships, cost analysis methods of distance education, a report from the Legislative Analyst's Office, recommendations, and appendixes.

Distance education has grown at a significant rate over the last five-years. It has nearly doubled in the number and percentage of course sessions. Likewise, the number of students taking DE courses has also nearly doubled. There are two types of distance education:

> 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.

Online instruction (asynchronous Internet) delivery is by the far the most widely used method of conducting DE because it offers students the greatest flexibility in taking courses. Almost half of the colleges offer degrees and certificates that can be obtained exclusively through distance education; some colleges offer over forty degrees and certificates. As colleges expand their DE offerings and align courses, the number of degrees and certificates entirely using distance education has grown.

The growth of DE programs has generated increased activity with the regional accrediting agency, the Accrediting Commission of Community and Junior Colleges (ACCJC), Western Association of Schools and Colleges (WASC), for "Substantive Change Proposals" related to

distance education. To help carry out this function and due to changes in the recently passed Higher Education Opportunity Act of 2008, ACCJC is modifying its policies.

Colleges continue to collaborate with each other to develop and support DE courses while working to improve methods of retaining students. Online services such as registration, tutoring, library access, virtual faculty office hours, etc. reveal how the DE student services have improved as the information age continues to be a major influence in how colleges interact with students.

Student Access to Instruction: The Increase in DE Course Sessions from 2005 -2010

Noncredit is such a small part of distance education that this report will address primarily credit DE. In 2005/2006 there were seven noncredit course sessions offered via DE and in 2009/10, there were 74 sessions.

For DE credit sessions, in 2005/2006, campuses offered 21,407 DE credit sessions, representing 4.69 percent of total traditional education credit sessions. In 2009/2010, DE sessions increased by 93 percent to represent 9.06 percent of all educational sessions offered. Table 1 compares the number of DE and traditional course credit sessions offered and the percentage of the total course sessions.

Distance education sessions continued to grow in 2009/10 although at a slower rate when traditional course sessions were shrinking. This reduction of traditional sessions and the slowing of the growth of DE session can be attributed to the state's budget crisis.

Table 1

Distance Education and Traditional Education Course Sessions			
Fiscal Years	**Distance Education**	**Traditional Education**	**Percentage**
2005-06	21,407	456,644	4.69%
2006-07	26,121	465,680	5.61%
2007-08	32,380	486,866	6.65%
2008-09	39,178	482,756	8.12%
2009-10	39,964	440,933	9.06%

Delivery Methods: The Impact of Internet Instruction from 2005 - 2010

There are 10 types of DE courses by delivery method in the COMIS Data Element Dictionary (DED). Appendix A defines them and shows the number of DE course sessions by delivery method. This section discusses the growth of online instruction (asynchronous and synchronous Internet) as compared to other delivery methods.

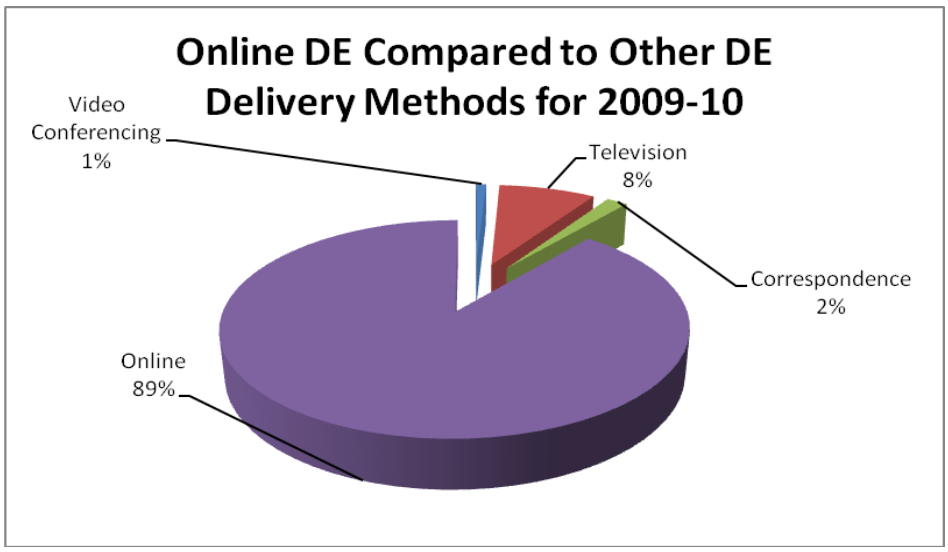
There has been a significant shift in delivery methods based on the advent and expansion of Internet based communication technologies. In 1995-96[1] televised instruction accounted for 79

[1] COMIS Data Mart

percent of all DE delivery methods but by 2009-10 it represented only 8 percent. Since 2002-03[2] all Internet-based instructional delivery methods have outpaced televised instruction as the predominant delivery mode for DE in the community colleges. In Appendix A, televised instruction decreased by more than 28 percent over the five-year period, accounting for 2,958 course sessions in 2005/06 and 2,129 course sessions in 2009/10.

While television-based courses were declining, Internet-based courses were expanding. The total number of DE course sessions delivered over the Internet grew by nearly 112 percent over the five-year period from 17,191 in 2005/06 to 36,372 in 2009/10. In 2009-10 the significant majority of the Internet based courses were asynchronous Internet, which accounted for over 92 percent of all Internet type instruction. Asynchronous and synchronous Internet accounted for 33,529 and 2,131 DE course sessions respectively. Besides television, other technologies used to deliver instruction included correspondence and video conferencing. Graph 2 shows the relationship of online instruction to television and these other methods of DE instruction.

Graph 2



[2] COMIS Data Mart

Enrollment by headcount from 2005-10

Table 2 shows the growth in unduplicated[3] student headcount over the five-year report period. Student headcount in DE courses grew from 328,372 in 2005/06 to 649,518 in 2009/10, an increase of 11.07 percent.

Table 2

Total Student Headcount in All Distance Education and Traditional Education Course Sessions 2005-10 (unduplicated headcount)				
Fiscal Year	**Distance Education**	**Traditional Education**	**Total**	**Percent of Total Headcount**
2005-06	328,372	2,630,207	2,958,579	12.48%
2006-07	392,355	2,694,149	3,086,504	14.56%
2007-08	483,884	2,810,572	3,294,456	17.22%
2008-09	611,689	2,923,137	3,534,826	20.93%
2009-10	649,518	2,758,831	3,408,349	23.54%

Enrollment Rates: Unduplicated Student Headcount Noticeable Trends from 2005-10

Table 3 and Graph 3 display an analysis of trends in the number of students enrolled in DE course sessions in comparison to students enrolled in traditional sessions. In the five -year period, there was an overall average enrollment growth rate of 1.10 percent in traditional education sessions compared to 15.48 percent in distance education sessions. In 2009-10, due to systemwide budget reductions resulting from the state fiscal crisis, there was a 5.96 percent decrease in enrollment in traditional sessions and a slowing in the growth of DE enrollment to 5.82 percent.

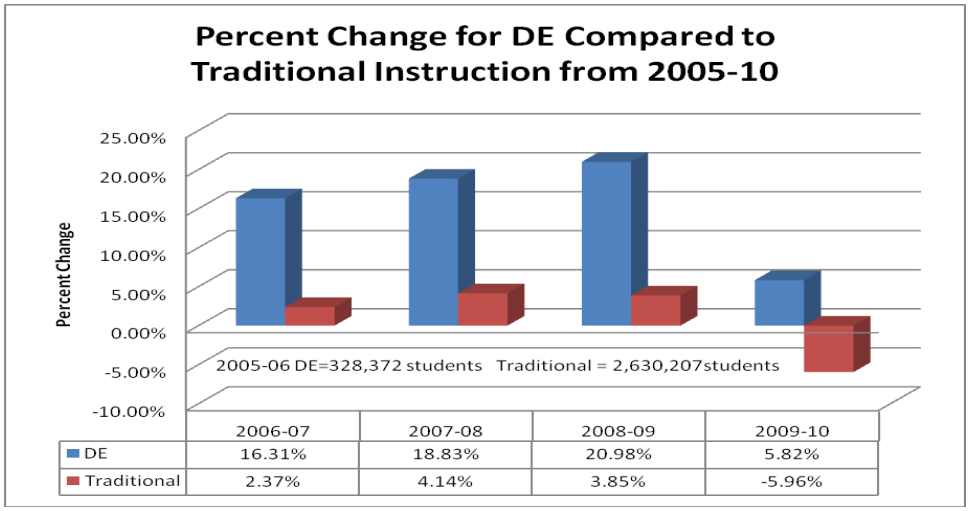
[3] For the purposes of this report, *total student headcount* represents the total number of students that enrolled in at least one distance education course and *unduplicated headcount* means that a student is only counted one time when enrolling in one or more distance education courses.

Table 3

Total Student Headcount Trends in Distance Education and Traditional Education Course Sessions 2005-10 (Unduplicated headcount)						
	DE			Traditional		
Fiscal Year	Headcount	Annual Variance (+ or -)	Percentage Change	Headcount	Annual Variance (+ or -)	Percentage Change
2005-06	328,372			2,630,207		
2006-07	392,355	63,983	16.31%	2,694,149	63,942	2.37%
2007-08	483,384	91,029	18.83%	2,810,572	116,423	4.14%
2008-09	611,689	128,305	20.98%	2,923,137	112,565	3.85%
2009-10	649,518	37,829	5.82%	2,758,831	-164,306	-5.96%
Average Percent Change			15.48%			1.10%

Graph 3 shows the percent change from the 2005-06 base year headcount of 328,372 for DE sessions and 2,630,207 for traditional sessions.

Graph 3[4]



[4] Percent change in this graph for 2006-07 is calculated from the base year 2005-06, there is no data shown for 2005-06.

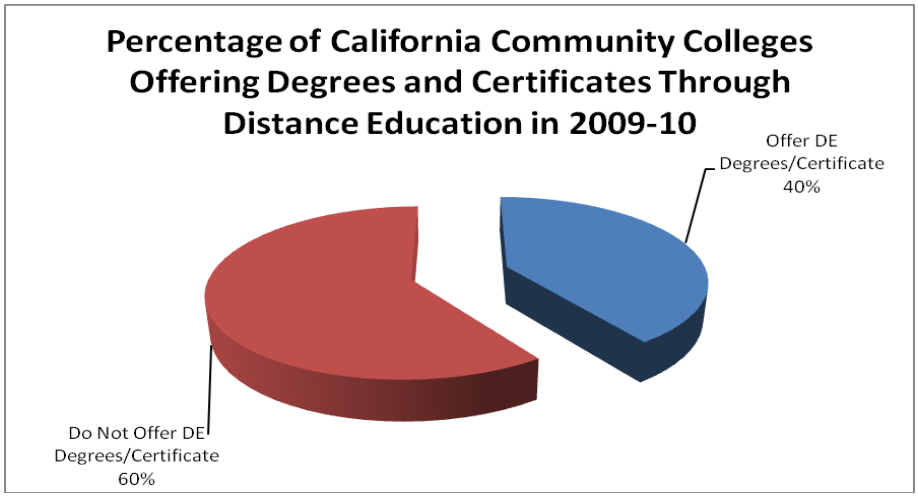
Degrees and Certificates

This section discusses the growing number of degrees and certificates available through distance education. The colleges have developed robust educational programs offered completely through distance education. As referenced earlier in this report, in March 2011 The Chancellor's Office 2011 DE Program Survey was sent to the system's DE coordinators. One of the questions addressed degrees and certificates:

> *Q15 - "In 2009-10 did your college offer an AA or AS degree or a Certificate of Achievement program where the student could complete the program 100% through distance education[5]?"*

The answer is shown in Graph 4, where 40% of the colleges are offering degrees and certificates completely through distance education. There are a total of 449 associate in arts and associate in science degrees and/or certificates of achievements being offered by 45 colleges using distance education.

Graph 4



[5] This does not mean exclusively online instruction the definition of 100% distance education used for this question can represent a mix of distance education delivery modalities that make up that 100%. Example: A degree or certificate program delivered 60% via online and 40% via TV broadcast with audio bridge would be 100% distance education. Please note that this represents the possibility of completing the degree via distance education.

Table 4 shows the number of degrees and certificates being offered by 45 colleges in the system.

Table 4

Degrees and Certificates Offered by the California Community Colleges through Distance Education

Colleges Offering Degrees and Certificates via Distance Education in 2009-10	Total Associate in Arts Degrees Offered	Total Associate in Science Degrees Offered	Total Certificates of Achievements Offered	Total Degrees and Certificates Offered
45	113	95	241	449

Modifications to Substantive Change and Distance Education Policies of the Accrediting Commission of Community and Junior Colleges

The Accrediting Commission for Community and Junior Colleges (ACCJC) Western Association of Schools and Colleges (WASC) is responsible for assuring that colleges meet the requirements of the Higher Education Opportunity Act of 2008 (see page 39) regarding distance education. At its January 2011 meeting the ACCJC considered two policy changes that will have an impact on California's community colleges and their continued implementation and expansion of distance education. One is a change to its substantive change policy and the other is a change to its policy on distance education and correspondence education. Both of these changes are scheduled to be presented for action at the next regularly scheduled meeting in June 2011.

There are seven changes the ACCJC considers substantive, of which one is "Change in Courses or Programs or their Mode of Delivery that Represents a Significant Departure from Current Practice". Specific changes to this policy are located at the following URL: http://www.accjc.org/wp-content/uploads/2010/09/Policy-on-Substantive-Change.pdf.

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

> **Example:** When an institution offers courses that make up 50% or more of the credits required for a program through an instructional delivery that is new for the college such as on-line instruction it is required to submit a substantive change request to the Commission. Federal law mandates that accrediting agencies require institutions to obtain accreditor approval of a substantive change before the degree is granted at the institution.

Table 5 provides the number of community colleges and substantive change proposals that have been approved.

Table 5

ACCJC Approved Substantive Change Proposals for a Change in Mode of Instruction to Distance Education in 2008-09 and 2009-10

Academic Year	Number of Colleges Submitting Substantive Change Proposals	Number of Substantive Change Proposals Approved
2008-09	14	14
2009-10	18	19
Total	32	33

Source: www.accjc.org

The ACCJC also considered as a First Reading proposed changes to its policy on distance education and correspondence education. Adopted in 2001, this policy has been edited and/or revised three times the most recent was in January 2010. Significant changes to its background statement and definitions for distance and correspondence education as well as minor modifications to its policy and policy elements sections are proposed. Specific changes to this policy are located on the ACCJC website at the following URL: http://www.accjc.org/wp-content/uploads/2010/09/Policy-on-Distance-Education-and-on-Correspondence-Education1.pdf.

Course Development and Support

This section addresses the issues related to the development of DE courses/curriculum in the system. The development of a DE course requires instructional design that links learning objectives to specific activities and measurable outcomes. There are many models available to faculty and colleges; one is to pair a faculty member with an instructional designer so that each brings unique skills to the course-creation process to enhance content.

The Chancellor's Office 2011 DE Program Survey

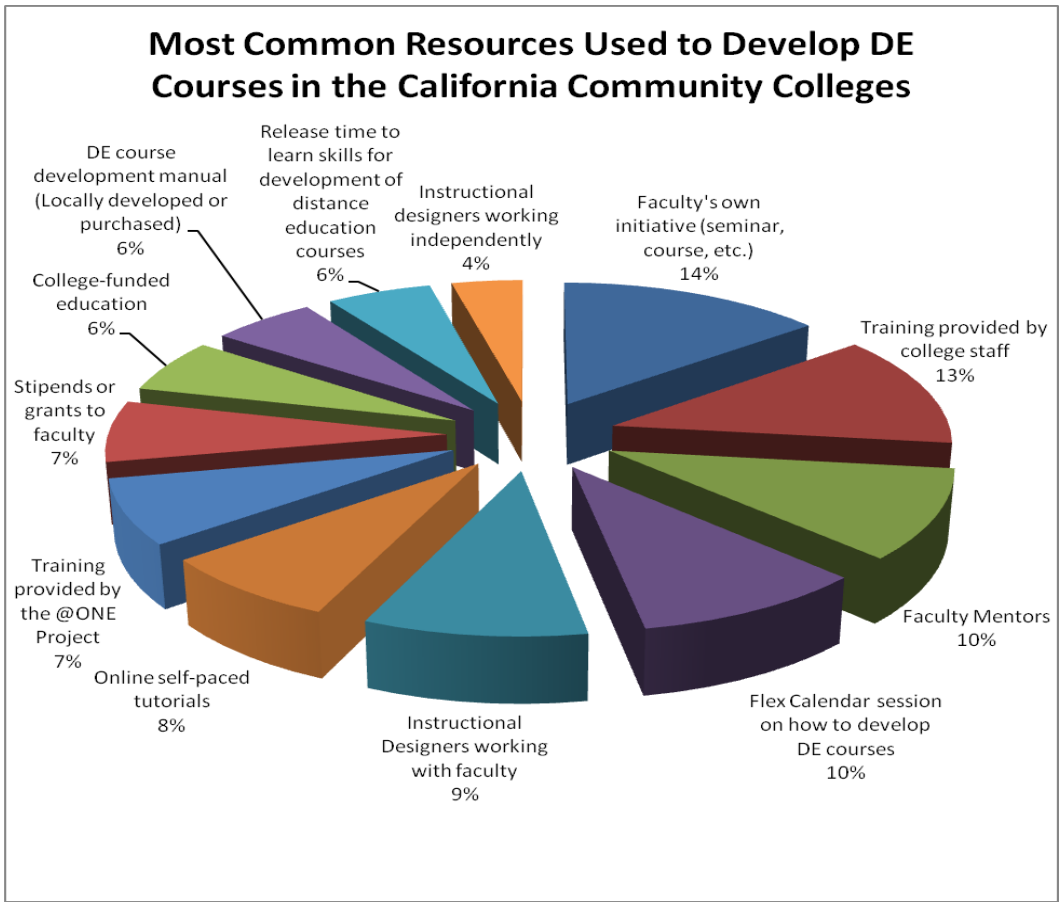
In The Chancellor's Office 2011 DE Program Survey, DE coordinators rated 13 areas in the development of distance education courses. The top three areas rated as very important were faculty training (80%), curriculum development/approval (78.5%), and regular personal contact between student and faculty (77.5%). Interestingly, faculty compensation was the lowest rated area in the very important category with only 16.5%. It was also the highest rated in the *not*

important category, again with 16.5%. The detailed results of the responses to this survey question are displayed in Appendix B.

Available Resources

The coordinators were also asked to rank twelve resources that were related to course development. Graph 5 displays the resources. The coordinators were specifically asked to rank the most common method of developing distance education courses and curriculum to the least common method. The resource ranked number one is the faculty's own initiative at 14 percent. All courses are generally developed by faculty and the development and growth of DE courses are also being fueled by individual faculty interest. This is followed at 13 percent by training being provided by the college staff.

Graph 5



Source: The Chancellor's Office 2011 DE Program Survey

Inter-College Collaborations

In the report "The Master Plan at 50: Using Distance Education to Increase College Access and Efficiency," released in October 2010, the Legislative Analyst's Office recommended more collaboration between California colleges and universities in the development of DE courses. Indeed, the colleges are collaborating in a wide variety of methods.

In the Chancellor's Office 2011 DE Program Survey, an average of 42.6 percent of the DE coordinators surveyed responded in March 2011 they have shared costs, materials, and faculty development activities. Table 6 displays the responses the DE 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?"

Table 6

Inter-College Collaborations in DE Course Development	Yes	No	Total
Collaborated on curriculum development	**43.6%** 48	**56.4%** 62	**100%** 110
Used faculty from two or more colleges to teach a course at two or more colleges	**23.6%** 26	**76.4%** 84	**100%** 110
Shared equipment or facilities to teach a course at two or more colleges	**31.5%** 35	**68.5%** 76	**100%** 111
Shared course materials	**47.3%** 52	**52.7%** 58	**100%** 110
Shared staff development activities between two or more colleges	**55.0%** 61	**45.0%** 50	**100%** 111
Collaborated on distance education program development	**44.0%** 48	**56.0%** 61	**100%** 109

Examples of inter-college collaborations include:

- Joint grants between colleges that has allowed for staff development between two colleges.
- An engineering education program – where three colleges are offering a summer workshop on distance education strategies for engineering students.
- College's instructional technologists participating in Blackboard 9 training at a local California State University campus.
- A Great Teacher's retreat on teaching English online and sharing pedagogy teaching methods using Etudes.

Faculty – Student Interaction

Significant faculty-student interaction is not only a requirement by title 5 of the California Code of Regulations for distance education, it is also a foundation of quality instruction, academic integrity, and student authentication.

In The Chancellor's Office 2011 DE Program Survey, DE coordinators were asked a question that addressed the most commonly used communications methods of interacting with students by faculty. On a scale of 1 to 5, with 5 being the most common use, they were asked to rate eighteen methods of communications they believed DE faculty used the most.

The two highest rated areas were online discussion boards (78.8%) and e-mailing (77.5%). Afterward, there was a significant drop off to third and fourth, class chat room (11.4%) and video conferencing with students (10.1%). Not surprisingly, the lowest form of interacting with students was meeting face-to-face on campus (1.3%). The full results of the responses to the question are displayed in Appendix C.

Online Student Services

When colleges began to expand the delivery of DE instruction, they were presented with the challenge of teaching at a distance and being able to offer students the same needed support and library services as if they were on a college campus. For more than a century, the higher education model had remained relatively stable. But, with the growth of the information age and globalization along with changing demographics, technology is driving today's trends in student services. Colleges are creating innovative ways to reach their distance learners with student support.

In The Chancellor's Office 2011 DE Program Survey, DE 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 D.

The following is a list of the seven communication areas:

- Service or program is offered only on-campus.
- Offered on-campus and through other communication technologies.
- Information available via static web page posting.
- Student can request or submit information to program or service via an interactive web page.
- Student can obtain information via the telephone through prerecorded message.
- Student can request or submit information to program or service using the telephone.
- Not offered.

The results of the two highest-rated student services within each communication type were:

- *Service or program is offered only on-campus* - Health Services (40.7%) and Assessment and Testing (Diagnostic, Placement, & Academic) (39.1%).
- *Offered on-campus and through other communication technologies* - Student to Student Communications (48.2%) and Faculty to Student Communications (39.8%).
- *Information available via static web page posting* - Course/Program Catalog (40.7%) and Schedule of Classes (36.6%).
- *Student can request or submit information to program or service via an interactive web page-* Registration (30.2%) and Student Accounts (30.1%).
- *Student can obtain information via the telephone through prerecorded message-* College to Student Communications (9.6%) and Admissions (7.2%).
- *Student can request or submit information to program or service using the telephone -* Academic Advising and Counseling (13.6%) and Admissions (12.9%).
- *"Not offered" -* E-portfolios (60.7%) and Financial Planning (Budgeting, Banking, Loan & Credit Card Management) (42.2%).

Successful Enrollment and Completion Rates 2005 - 2010

A gap exists in both successful completion[6] and retention[7] rates between DE and traditional instruction. Successful completion of a course is defined as performance with a grade of "C" or better. Students receiving a grade of "D" or lower were not counted as successful completions.

Table 7 displays the comparison of success rates between DE students and traditional education students in credit courses. The number of students in Table 7 is a total student duplicated headcount which means that the students are counted more than once. If they enrolled in two DE courses they were counted two times, etc. The distance education success rate rose slightly in 2009/10, from 53 percent to 57 percent.

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[6] The **success rate** as defined by COMIS is:
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*

[7] The **retention rate** as defined by COMIS is:
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*

This success rate compares to an increase from 64 percent in 2005-06 to 67 percent for traditional education students. The gap for the success rate between traditional instruction and DE instruction closed from 11 percent to 10 percent. The success rate for DE courses grew by 2 percentage points in one year from 2008-09 to 2009-10, while the success rate in traditional courses remained the same.

Table 7

Success Rates for Credit Distance Education and Traditional Education Course Sessions (Duplicated Headcount)					
Credit Distance Education Sessions					
Student Outcome	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Completed	319,541	392,145	500,142	649,997	696,088
Not Completed	289,005	346,551	425,762	525,136	524,723
Total	608,546	738,696	925,904	1,175,133	1,220,811
Success Rate	53%	53%	54%	55%	57%
Credit Traditional Education Sessions					
Student Outcome	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Completed	5,390,916	5,469,554	5,725,712	6,208,474	6,264,182
Not Completed	3,024,343	2,963,846	3,023,945	3,105,924	3,024,017
Total	8,415,259	8,433,400	8,749,657	9,314,398	9,288,199
Success Rate	64%	65%	65%	67%	67%

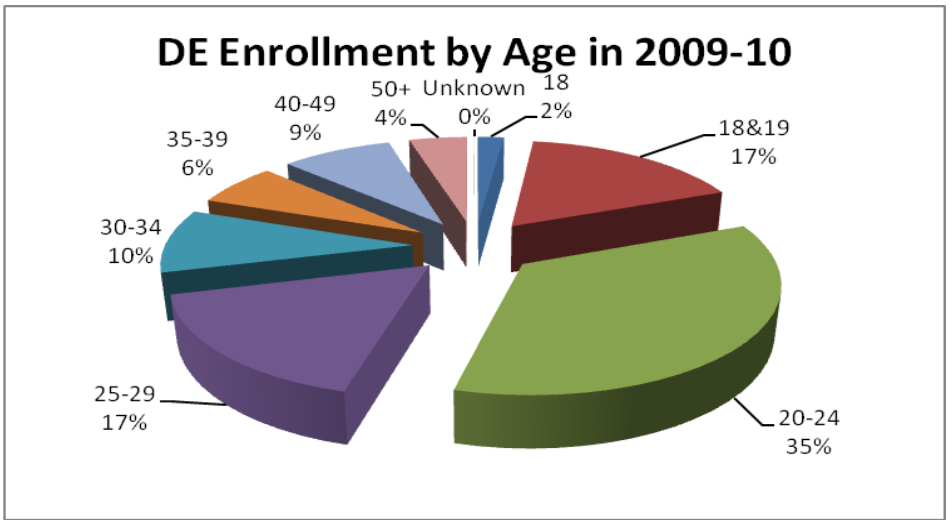
Enrollment and Completion Rates by Age

Appendix E compares student success rates by age in DE credit course sessions. The categories are: less than age 18; 18–19; 20–24, 25-29, 30–34, 35–39, 40–49, and 50 and older. Data is also shown for students who declined to report their ages. Success rates remained constant from 2005-06 through 2007-08, but in 2008-09 and 2009-10 success rates improved significantly. The largest increase is in the 20-24 year-old group which increased by five percentage points. The smallest growth was in the 40-49 year-old category of only 2 percentage points. Even this growth occurred in the last two years after remaining constant for the first three years of the five-year period. The only area that had a decrease in the rate of student success in DE courses was the unknown area dropping from 58 percent in 2005-06 to 54 percent in 2009-10.

This success rate can be attributed to better instructional design and increased familiarity with distance education instruction by students. As more students took DE courses their ability to perform in the new delivery method improved.

Distance education courses are taken predominantly by young people. Graph 6 describes the enrollment by age for 2009-10. The largest number of students taking DE courses was in the 20-24 age group growing from 216,219 in 2005-06 to 428,234 in 2009-10. The age categories 18-19 and 25-29 were tied for the second largest areas with both representing 17 percent each of the total enrollment in 2009-10. These three categories represent 69 percent of all students taking DE courses in 2009-10, an indication that a significant number of DE students are under 30 years of age.

Graph 6

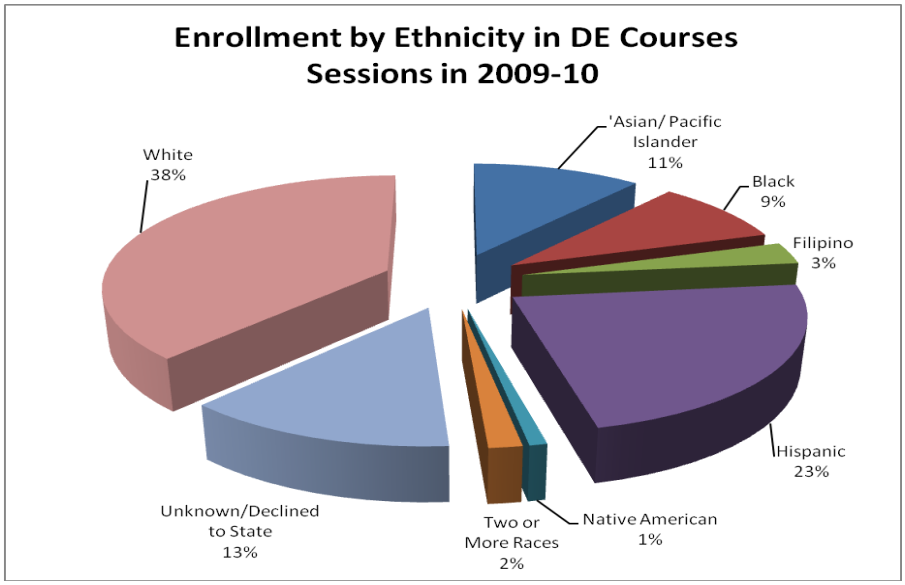


Enrollment and Completion Rates by Ethnicity

Appendix F compares success rates by ethnicity. In the five-year period following a similar pattern as age success rates remained constant the first three years of the period and increase significantly in the last two years. The largest increase was for Filipino students improving by 7 percentage points from 50 percent to 57 percent. The smallest success growth was in the two or more races category where after posting increases in the first three years, from 50 percent to 52 percent, it decreased by 4 percentage points in the fourth year before improving by two percentage points in 2009-10 to end up at 50 percent, the same as 2005-06.

Graph 7 describes the enrollment in 2009-10 by ethnicity. The largest category of students is White students accounting for over 38 percent of the students taking DE courses in 2009-10. This category grew by over 67 percent from 277,980 students in 2005-06. The next largest category is Hispanic students representing over 23 percent and growing by over 136 percent from 119,239 in 2005-06 to 282,322 in 2009-10.

Graph 7



Enrollment and Completion Rates by Gender

Graph 8 shows more females take DE courses than males at 61 percent compared to 38 percent. Table 8 compares success rates by gender. The success rate between males and females improved overall by 3 percent; females performed slightly better than males during this time period, maintaining a 2 percent gap.

Graph 8

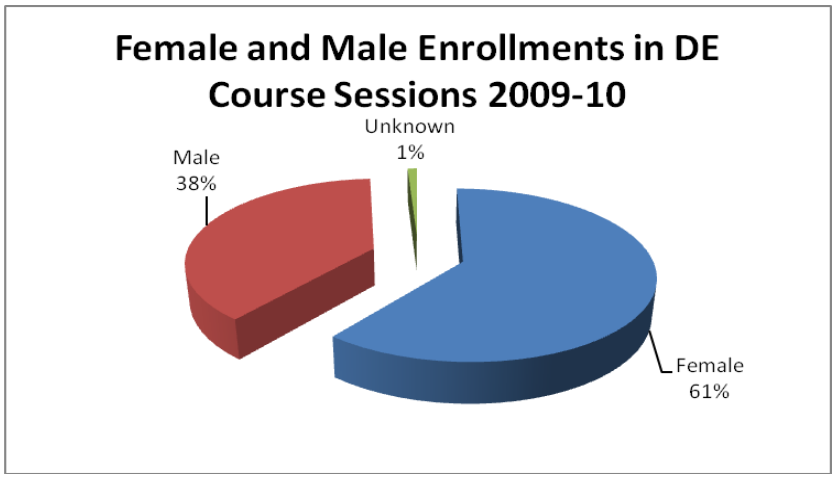


Table 8

Student Enrollment and Completion Rate by Gender in Credit Course Sessions (duplicated headcount)						
Gender	**Student Outcome**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Female	Completed	200,641	244,575	305,512	394,200	419,447
	Not Completed	179,232	214,495	264,494	328,115	323,267
	Total	379,873	459,070	570,006	722,315	742,714
	Rate of completion	53%	53%	54%	55%	56%
Male	Completed	115,375	143,009	183,338	239,059	252,644
	Not Completed	109,679	132,349	166,402	203,055	213,979
	Total	225,054	275,358	349,740	442,114	466,623
	Rate of completion	51%	52%	52%	54%	54%
Unknown	Completed	1,987	2,380	3,434	6,412	6,746
	Not Completed	1,632	1,888	2,724	4,292	4,728
	Total	3,619	4,268	6,158	10,704	11,474

Student Enrollment and Completion Rate by Gender in Credit Course Sessions (duplicated headcount)						
Gender	**Student Outcome**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
	Rate of completion	55%	56%	56%	60%	59%

Enrollment and Completion Rates by Disability

There are nine categories of disabilities that are recorded in COMIS data:

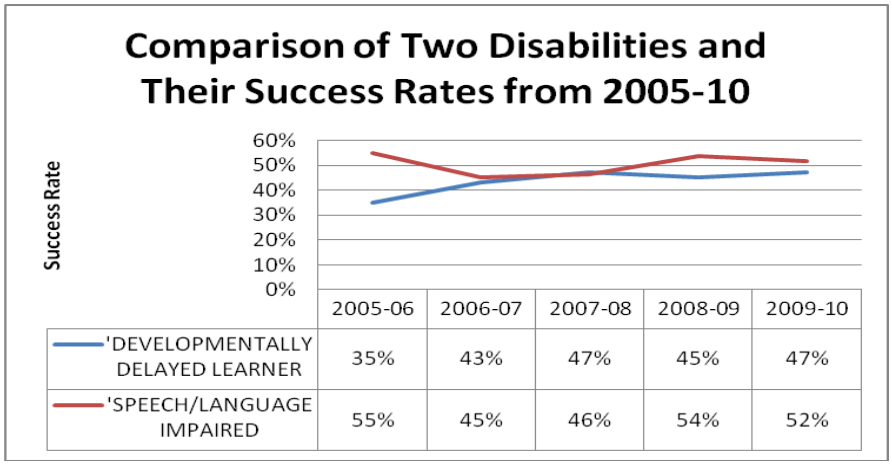
- acquired brain injury
- developmentally delayed learner
- hearing impaired
- learning disabled
- mobility impaired
- other disability
- psychological disability
- speech/language impaired and visually impaired

Appendix G compares success rates of students with disabilities in DE course sessions. There was significant improvement in success rates for students who are developmentally delayed learners (+12 percent), from 35 percent to 47 percent over the five-year period. There was a slight decline in rates for students with acquired brain injury (-1 percent) from 2008-09 to 2009-10 as well as for speech/language impaired (-2 percent) during the same period. The latter dropped 10 percentage points from 2005-06 to 2006-07 before rebounding in 2008-09 to 54 percent. Speech/language impaired has demonstrated the most volatility among all disabilities.

There was a significant decline in success rates for students who are visually impaired (-3 percent) in the first three years but these students have improved 5 percentage points since the last reporting year of 2007-08. This may be an outcome of improved services from the colleges in providing accommodations such as speech recognition, audio content and other adaptive learning tools.

Graph 9 compares two disabilities and the very different outcomes they have experienced over the three year period. The two areas are DEVELOPMENTALLY DELAYED LEARNER and SPEECH/LANGUAGE IMPAIRED, who demonstrate the greatest growth and the most volatile categories respectively.

Graph 9



College Retention Efforts 2005 – 2010

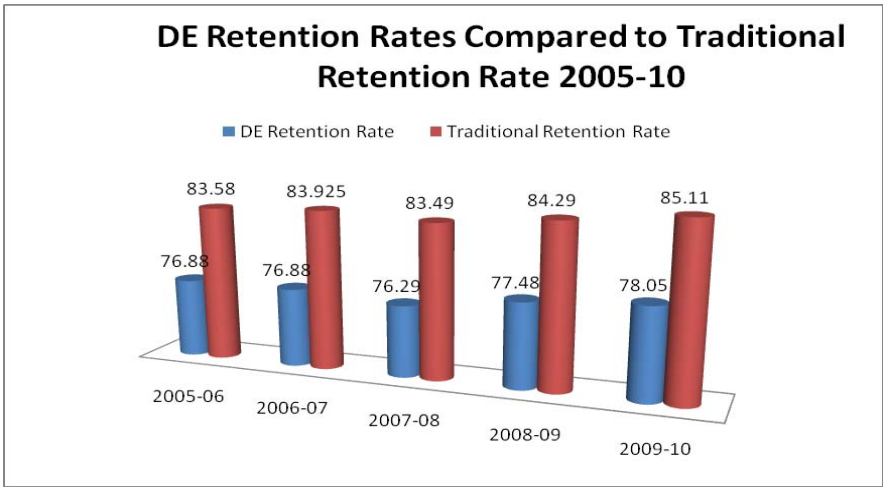
In the previous section we discussed the following successful completion rates: overall, age, gender, ethnicity, and disability. This section addresses the DE retention rate, which is when a student gets a "W" in the course. Students who drop a DE or traditional course with a "W" grade are considered not to have been retained. Colleges have developed a variety of approaches to improving retention in DE courses ranging from institutional data mining to instructional redesign.

The focus in the early years of DE implementation was on growth. In the last five-years, more attention has been devoted to retaining students and closing the retention gap. Improving the rate of retention can improve the fiscal impact of DE courses. As the number of students taking DE courses continues to grow over the next five-years the importance of closing this gap must become a priority of colleges.

Graph 10 compares the traditional retention rate to the DE retention rate. There is an average retention gap between DE and traditional instruction of 6.96% over the five-year period. In 2009-10 the DE retention rate was at its highest (78.05%) and at its lowest (76.29%) in 2007-08.

Face-to-face (FTF) retention rates have averaged 84.08. The FTF rate was also at its highest during 2009-10 (85.11%) and at its lowest (83.49%) in 2007-08. This graph displays that the rates have generally mirrored each other. When one falls so does the other, and when one raises the other does also.

Graph 10



A strong contribution to student retention appears to be a positive student-faculty relationship. Establishing direct contact with students and making them aware of the requirements of a DE course is essential. Successful instructors keep their students engaged through frequent e-mails, prompt responses, regular hours during which they can be contacted, and adding personal touches such as photos and graphics to lessons.

The Center for Community College Student Engagement (CCCSE)[8] conducts a national survey of 719 colleges in 49 states that measures five categories linked to student engagement: academic challenge, active and collaborative learning, student-faculty interaction, student effort and support for learners.

Results from this survey help colleges focus on good educational practice — defined as practice that promotes high levels of student learning and retention — and identify areas in which community colleges can improve their programs and services for students. The CCCSE survey results show that colleges are expanding their strategies in the instructional design of DE courses that can lead to improved retention.

DE administrators are also now requiring instructors to have a plan to incorporate retention strategies into their class and encourage more student participation in study groups, collaborative projects, etc. Many instructors are given the power to make flexible deadlines for students struggling to balance their studies with other commitments. This enables the instructor to lessen some of the burden the students feel, and hopefully keep them enrolled in the class.

[8] CCCSE is affiliated with the University of Texas, College of Education, Department of Educational Administration, Community College Leadership Program, www.cccse.org

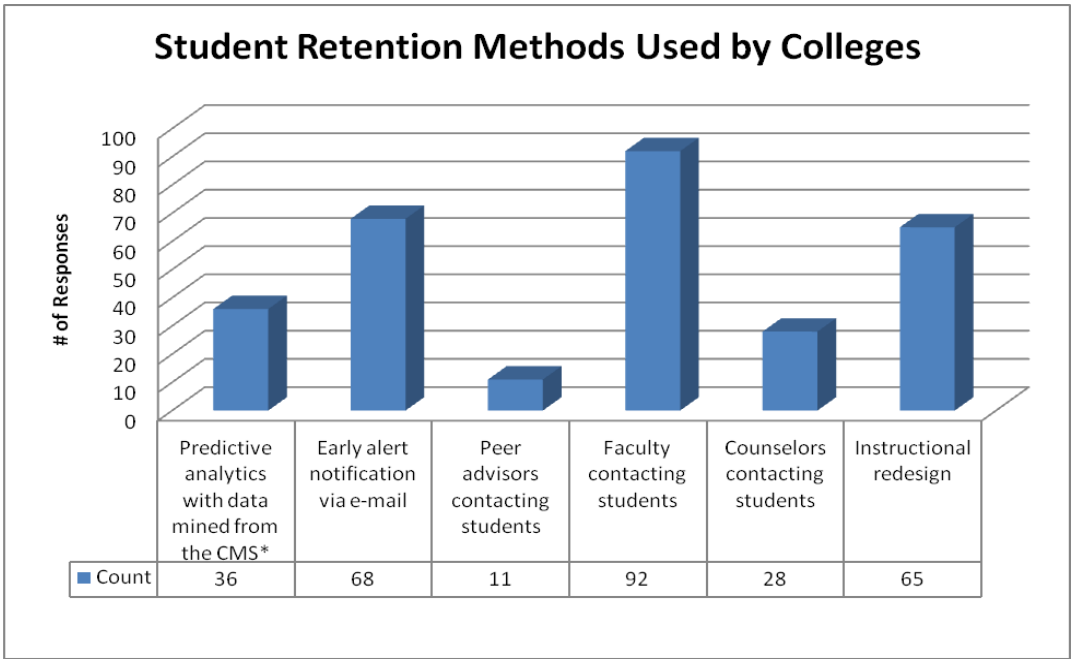
Other retention strategies include:

- an advisor assigned to work with DE students
- analysis of data provided by institutional researcher as part of program review process
- a CTE counselor is in the online course with students
- early assessments
- embedded tutors
- evaluative surveys
- faculty contacting students
- faculty training
- Human Presence Design[9]
- instructor contacts student when logins have not taken place
- mandatory regular student contact

In The Chancellor's Office 2011 DE Program Survey, DE coordinators were asked to identify their student retention efforts. The six strategies are shown on Graph 11. Faculty contacting students was the method most selected, which is consistent with other observations.

[9] **Human Presence Design** is the practice of incorporating video and audio of the instructor teaching an online course and therefore increasing interaction between faculty and student which increases and enhances engagement, comfort and, eventually, retention. Dr. Doug Hersh from Santa Barbara City College has pioneered this approach and has demonstrated the effectiveness of this design through research conducted in completing his dissertation in 2009. His research demonstrated that students feel more satisfied in their online courses when they feel engaged through human presence design by finding intrinsic satisfaction in their human presence courses and complete them at higher rates and with higher levels of academic success. His research demonstrates that when students are able to see the face of the instructor who is guiding them through a course, they are more likely to trust that professor, and they feel more invested in the course which translates into improved retention rates.

Graph 11



**Course Management System*

The Chancellor's Office 2010 "W" Student Survey: Why Students Take and Drop DE Courses

As stated earlier, the average retention gap between DE and traditional instruction over the last five-years is 6.69%. The Chancellor's Office Management Information System (COMIS) can calculate the retention rate; however, there was no systemwide information about *why* students withdrew from distance education courses.

In an effort to learn more about the *why*, in December 2010 the Chancellor's Office invited colleges to participate in a survey. Fifty-six colleges responded and in January of 2011 the Chancellor's Office sent a survey to over 50,000 unduplicated headcount students who withdrew from at least one distance education course between the 20% and 75% date stamps of the Fall 2010 term. A list of participating colleges can be found in Appendix H.

The Chancellor's Office 2010 "W" Student Survey was based almost exclusively on the Fredericks Community College (FCC) of Maryland's 2007 ""W" Survey of Online Students study for the terms of Winter 2006 and Spring 2007. The FCC study results are based on 100 telephone interviews from a sample of 356 students who withdrew from online courses. It also tested the hypothesis that there is a statistically significant overlap between the reasons why the course is taken online to why the course is dropped.

The Chancellor's Office 2010 "W" Student Survey had several differences from the FCC "W" Survey:

- It was conducted electronically as opposed to telephone interviews.
- It included all types of distance education delivery formats as opposed to only online distance education.
- The sample population was significantly larger in students contacted and responses received.
- Less than 20% of the FCC survey questions were eliminated, added, or modified to reflect the method of new delivery (electronic) and other differences between priorities and regions.

The purpose of The Chancellor's Office 2010 "W" Student Survey was to gather information about why students withdraw from distance education courses, to test the hypothesis of the FCC"W" Survey, and to compare the results between the two surveys.

The Chancellor's Office 2010 "W" Student Survey established a baseline of systemwide information, which will identify student interventions that can effectively close the retention gap. Increased student retention equates to improved student success and degree completions.

The survey contained 16 questions in five areas related to why a student withdrew from a distance education course. Students were asked to provide their opinions and to select from a range of options to questions in the various areas of the survey. The five areas and the number of questions in each area are identified below:

- Student identification Information (3 questions)
- Preliminary distance education questions (4 questions)
- Reasons why the student enrolled in the distance education course(s) (3 questions)
- Reasons why the student dropped the distance education course(s) (3 questions) and
- Future distance education use and the student's advice to others and the college (3 questions)

The survey was electronically sent to the e-mail addresses of all the students in the 56 participating colleges (see Appendix H) who enrolled in a distance education course and withdrew from the course in the Fall 2010 term. The survey tool used to deploy the survey was SurveyGizmo, a third party survey vendor that offers a secure encrypted database collection and storage service.

The data was aggregated statewide using the 56 colleges out of 112 in the system. Participating colleges received their data with student identifier information for further use in local research efforts. There were a total of 11,475 responses received, 1,969 partial, and 9,506 complete. The required statistically valid number of responses for a 99% confidence index, with 50% prevalence rate and 2% error rate was 3,380. The responses were 300% over what was minimally required.

The reasons why students take DE courses can be summarized in one word: *convenience.* When asked to rate 13 reasons as very important, somewhat important, or not important at all, students selected:

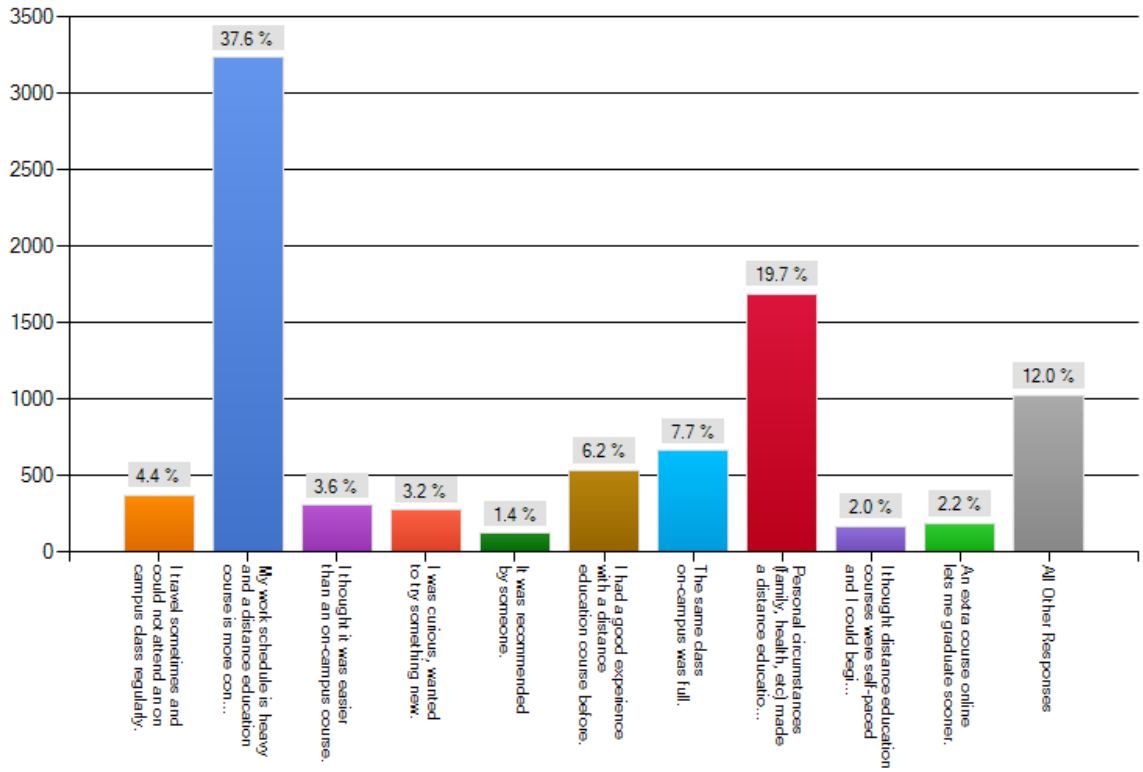
1. My work schedule is heavy and a distance education course is more convenient (57.6%);
2. Personal circumstances (family, health, etc) made a distance education class more convenient (55.5%)
3. I had a good experience with a distance education course before. (44.1%).

When asked to select the most important reason from among the 13, students selected No. 1, above, at 37.6% and No. 2 at 19.2%. Graphs 12 -14 display the responses to questions from The Chancellor's Office 2010 "W" Student Survey.

Graph 12

Primary Reasons for taking DE Courses

From among the previous reasons which was the most important for choosing a distance education course. (Select only one)



Students were also asked why they dropped DE courses and given a list of 20 reasons to rate as very important, somewhat important, and not important. The top three reasons given were:

1. I had personal problems (family, health, job, childcare, etc) (39.9%)
2. I could not handle the combined study plus work responsibilities (29.9%)
3. I got behind and it was hard to catch up (29.6%)

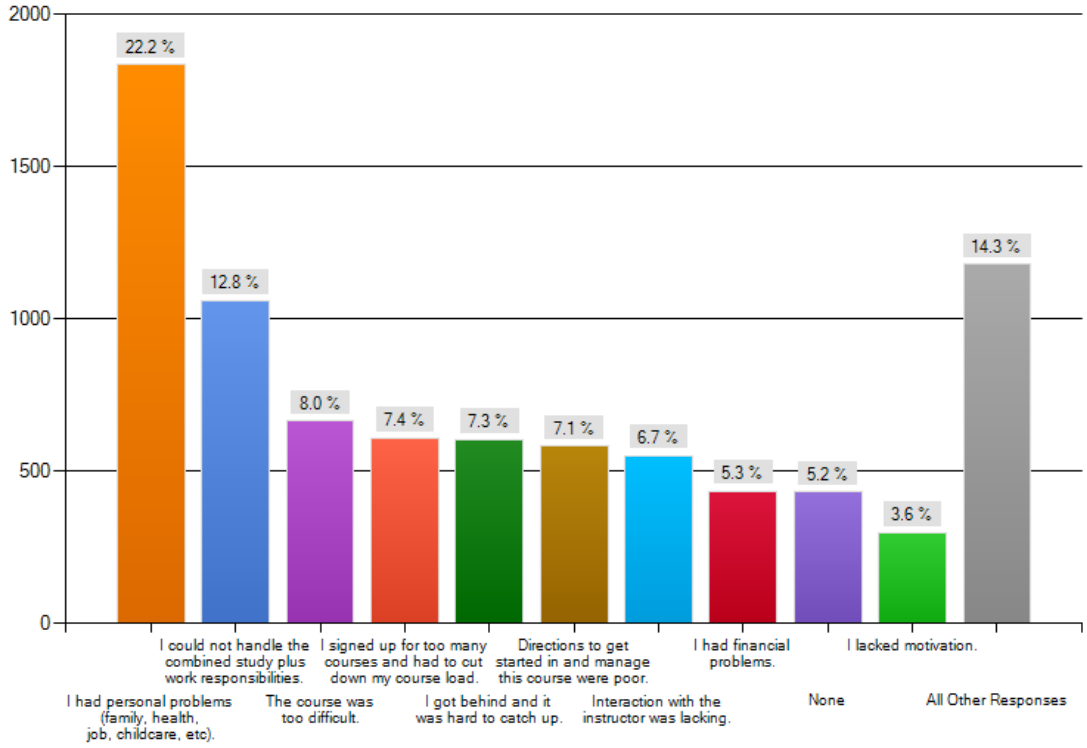
When asked to select the primary reason from among the 20 reasons, students again chose the top two reasons from above at 22.2% and 12.8 % respectively.

Graph 13, below, from The Chancellor's Office 2010 "W" Student Survey displays the responses.

Graph 13

Primary Reasons for dropping DE courses:

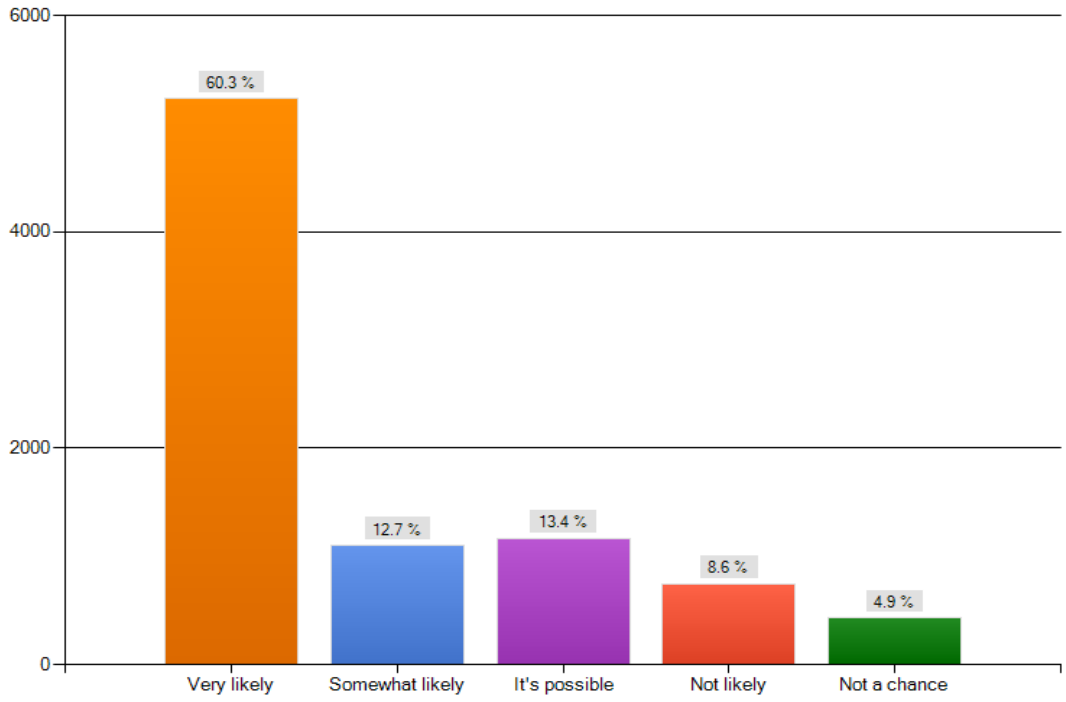
Overall what do you feel was the main reason you were NOT able to successfully complete this distance education course? (Select only one.)



Students were asked if they were likely to take another DE course in the future. Graph 14, on the next page, from The Chancellor's Office 2010 "W" Student Survey, displays the responses.

Graph 14

How likely are you to register for another online course?



Distance Education
Student Authentication

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 and 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.

Student authentication in distance education has been an issue of interest to federal policymakers for several years.

The growth in enrollments and in the number of educational providers of online learning fueled concerns about institutions verifying the identity of students throughout the cycle of an online course: registration, participation, assessment, academic credit. Passage of the Higher Education Opportunity Act of 2008, followed by federal rulemaking, resulted in new regulations.

One regulation required accrediting agencies to assure distance and correspondence education programs have processes in place to verify student identity. There are three authentication approaches stipulated in the new federal guidelines:

1. Secure credentialing/login and password
2. Proctoring
3. Technology authentication systems

The issue is complex and frequently misrepresented. Among many e-learning professionals, it seems unfairly aimed only at online education when similar concerns of identity falsification could apply in traditional higher education settings. The policy and regulatory conversations concerning identity authentication, originally focused on academic dishonesty, now encompass the serious problem of financial aid fraud, as reported in some high-profile cases.

Virtually every community college is using a DE Course Management System (CMS) that meets the first criteria identified above for secure credentialing/login and password. However, the

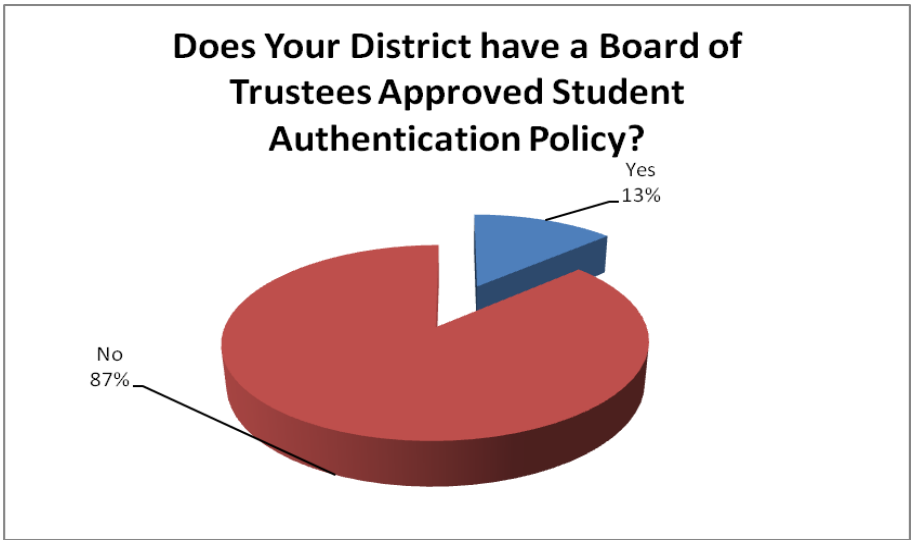
regulation guidelines place an expectation that colleges will continue to look at future technological solutions. While colleges are for the most part compliant with the regulations, few have taken formal positions on student authentication.

As depicted in Graph 15 when campus DE coordinators were surveyed in March 2011 and asked, “Does your district have a board of trustees approved student authentication policy?” Eighty-seven percent responded no, they did not. More colleges have indicated they will be developing such a policy. This is expected due to the changes in the distance education policy definition at the regional accrediting agencies.

In Graph 15, the 87 percent is misleading because this is a new requirement and colleges are beginning to take these policies to their boards of trustees for review and adoption. It is fully expected that most if not all colleges will have such a policy in place within a year.

Graph 15

Percent of CCC Districts with an Approved Student Authentication Policy



Distance Education
Academic Integrity

The issue of academic integrity is broader than distance education and is defined as the moral code or ethical policy of academia. This includes values such as not cheating or committing plagiarism, maintenance of academic standards, and honesty and rigor in research and academic publishing.

Academic integrity is a fundamental value of teaching, learning and scholarship. According to the Center for Academic Integrity at Clemson University, there is growing evidence that students are cheating and plagiarizing in record numbers in both face-to face and distance education courses.

The issue of academic integrity is especially highlighted in distance education because of the perception that it is easy to cheat or have someone else complete the work when the student is at a distance. This issue is therefore tied to student authentication but is addressed in this report separately because it is an issue that impacts both areas.

Academic integrity is essential to the success of the mission of the California Community Colleges. It provides a foundation for responsible conduct in our students' lives after graduation. It can be difficult to translate values, even widely-shared values, into action—but action is needed now to promote academic integrity on our campuses in general and in distance education in particular. Researchers agree that rates of cheating among American high school and college students are high and increasing. The issue was a topic discussed at length in the federal rulemaking process associated with the passage of the HEOA of 2008.

Appendix I is a list of Best Practice Strategies to Promote Academic Integrity in Online Education, developed by partnership of WCET, the Instructional Technology Council (ITC), and the University of Texas TeleCampus. This list is based on "Institutional Policies/Practices and Course Design Strategies to Promote Academic Integrity in Online Education," produced by WCET in February 2009 and updated in April 2009. In May 2009, the Instructional Technology Council surveyed its membership to invite feedback and additional strategies to enhance the WCET work.

The strategies are grouped into five categories:

- Institutional Context and Commitment
- Curriculum and Instruction
- Faculty Support
- Student Support
- Assessment and Evaluation

While not specific to distance education, the Academic Senate for the California Community Colleges (Academic Senate) has demonstrated significant leadership in the area of academic integrity through the adoption of eight resolutions on the topic and the development and publication of the paper, *Promoting and Sustaining an Institutional Climate of Academic Integrity*, by its Educational Policies Committee in the spring of 2007.

This Academic Senate paper is in response to two resolutions from the Fall 2005 Plenary Session concerning academic dishonesty:

- Resolution, 14.02, "Student Cheating," sought clarification on a System Office legal position that limited the ability of local faculty to fail a student for a single incident of academic dishonesty.

- Resolution 14.01, "Student Academic Dishonesty and Grading," required the Academic Senate to investigate faculty legal and professional rights and obligations with regards to dealing with academic dishonesty, including options for grading, disciplinary action, definitions of academic dishonesty, a statement of best practices, and an explanation of student rights.

The paper discusses the need for a culture of academic integrity that enriches the educational experience of students and faculty and, indeed, all individuals associated with the college as employees or community members. The paper recommends that colleges involve all constituent groups, particularly student leaders in developing and promoting policies and procedures supportive of a climate of academic integrity. Students have key responsibilities and protections provided by Title 5 51023.7 and have the potential to raise awareness throughout an institution concerning academic integrity. The paper includes examples of policies and procedures that have been adopted at several colleges. Central to all discussions of academic integrity is the importance of due process and the protection of student rights.

Suggestions for promoting a climate of academic integrity are provided, along with examples of policies are applied to such issues as test taking, technology, distance education, Internet use, group work, and maintaining the integrity of graded assignments. Emphasis is placed on the roles of classroom faculty, library services, counseling, and the need to institute mandates for information competency as a means of creating and sustaining a culture of academic integrity.

The *Promoting and Sustaining an Institutional Climate of Academic Integrity* paper is located at the following URL: http://www.asccc.org/node/175013.

The Academic Senate has adopted eight resolutions addressing the issue of academic integrity:

- Fall 2005, 14.02 - Student Cheating
- Fall 2005, 14.01 - Student Academic Dishonesty and Grading
- Spring 2007, 19.02 - Adoption of Academic Integrity Paper
- Spring 2007, 19.03 - Resolution to Amend Adoption of the Academic Integrity Paper
- Spring 2008, 14.03 - Academic Integrity
- Fall 2008, 02.02 - Academic Integrity and the Higher Education Reauthorization Act of 2008
- Fall 2008, 13.03 - Academic Integrity Resource Library
- Fall 2008, 14.01 - Academic Dishonesty

Distance Education
Programs and Partnerships

This section addresses the various programs and partnerships that the Chancellor's Office and colleges have to support DE implementation in the system. It discusses in detail the following areas, state authorization, California Virtual Campus, @ONE, Educational Technology Advisory Committee (ETAC), High Tech Center Training Unit, Open Educational Resource (OER) Initiatives, Affordable Content Initiatives, Distance Education Coordinators, CCCConfer, and 3CMedia Solutions.

State Authorization

New federal regulations may require the California Community Colleges to register or apply in other states and seek their approval to offer instruction in their state to students enrolled in DE courses and programs. This requirement can be triggered by a number of factors that currently vary from state to state. As a result of the passage of the *HEOA of 2008* and the federal rule making process, on October 29, 2010 the U.S. Department of Education released the following new regulation for higher education institutions as "§ 600.9(c) State authorization:"

> *"If an institution is offering postsecondary education through distance or correspondence education to students in a State in which it is not physically located or in which it is otherwise subject to State jurisdiction as determined by the State, the institution must meet any State requirements for it to be legally offering postsecondary distance or correspondence education in that State. An institution must be able to document to the Secretary the State's approval upon request."*

Institutions are expected to comply **in each state** in which they "operate" by July 1, 2012. U.S. Department of Education officials informed colleges through a second "Dear Colleague" letter on April 20, 2011 that institutions possessing proof that they are applying in a state by July 1, 2012 will be considered as "good faith" that the institution is in compliance for the 2012-2013 year.

Historically, the regulation of education in the United States has been the province of the individual states, and over time every state has established laws and rules governing institutions operating within their boundaries. The fundamental premise of this regulation 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.

First, most states consider the conduct of "instructional" activities the appropriate trigger for state oversight. However, the term "instructional" abides a multitude of 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.

Second, 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 consider as part of their determining whether to assert jurisdiction, the degree to which an institution "directly targets" their residents.

What is most apparent is the lack of consistency among the states in terms of how they view the regulation of distance education. Some states have established rigorous criteria to determine when an institution is engaged in sufficient activity within its borders to mandate an assertion of its regulatory authority. At the other extreme are states which have taken the position that the mere act of enrolling their citizens in a distance education program – without any further institutional contact with the state – is sufficient to require that institution to seek and secure state authorization. In between lays a multitude of combinations and permutations.

To assist institutions in finding and complying with these regulations, the WICHE Cooperative for Educational Technologies, Southern Regional Education Board, American Distance Education Consortium, and the University of Wyoming formed a partnership and produced and released on March 17, 2011 the document, *State Approval Regulations for Distance Education: A Starter List.*

Appendix J is a chart of the states and their related requirements to seek approval to offer DE courses and programs in respective state. This list is in flux and can and is expected to change over time. The California Community Colleges will need to look at their enrollments and determine where their out of state enrollments are and then look at the chart to determine their next course of action.

California Virtual Campus

The California Virtual Campus (CVC) is a statewide community college system program to create comprehensive distance education support for faculty and students, including the development of content and delivery of online and hybrid instruction. The principal goals are to support the California community colleges in online course offerings, e-learning and/or distance education. It is funded through a grant in partnership with Butte College.

In 2008, California State Senate Bill 1437 created an expanded role for the California Virtual Campus as an educational entity. It authorized the "California Virtual Campus to pursue specified purposes relating to education technology to the extent funding is available."

The Chancellor's Office has responded to the direction of this bill in support of online and distance education by:

- Forming the California Educational Collaborative, a K-20 group dedicated to sharing information on technology. This group is currently collaborating with the California Stem Learning Network on intersegmental science, technology, engineering, and math (STEM) initiatives.
- Launching a community-based organization Connectivity Pilot Project with CENIC and establishing initial grants to provide high-speed internet access to community-based organizations to increase access to online education resources.
- Assisting the Chancellor's Office Academic Affairs Division with the development of two intersegmental online California High School Exit Examination preparation online tutorial courses and expanding their use to 42 counties. These tutorials prepare students to pass this critical exam that is needed to obtain their high school diplomas.
- Partnering with LA Trade Tech, expanded course concurrent enrollment opportunities for underrepresented and underserved K-12 students across the state by integrating high-quality interactive digital media and providing ten online classes that fulfill both high school and college credit transferrable to four-year colleges and universities.
- Starting the electronic portfolio[10] pilot project, ePortfolio California which recruited 21 participating institutions from all California educational segments (K-12, California community colleges, CSU and UC).

@ONE

This project was funded through a grant in partnership with Evergreen Valley and Mt. San Jacinto Colleges. In 2009/10, @ONE responded to the demand for quality distance education and launched the Certification Program for Online Instructors, created a vibrant community of distance education coordinators and continued to promote participation in the Online Teaching Conference.

[10] At its basic core, an ePortfolio is a digitized collection of artefacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution. Students use ePortfolio to showcase accomplishments and reflect progress and skills development, as well as develop and sustain career paths. Faculty use ePortfolio to learn more about the ways California and national educators are using ePortfolios to improve student engagement and learning outcomes. Faculty can also use ePortfolios to demonstrate their research and teaching achievements.

The Certification Program for Online Instructors created 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 literature 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 ePortfolios to demonstrate participant competency and store training artifacts.
- Custom certification programs for districts and colleges.

Educational Technology Advisory Committee

The board of governors Standing Order 409, Distance Education and Education Technology, directs the chancellor to establish an advisory committee "…to advise the Chancellor's Office on the vision, policy, and planning in support of distance education and education technology." The advisory group is composed of faculty, administrators, staff, and students from the system and works in collaboration with the Technology and Telecommunications Advisory Committee and System Advisory Committee on Curriculum in formulating recommendations to the chancellor. The committee has been in existence since 1994.

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, ADA/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 College 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 Educational 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 112 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. The document can be accessed at the following URL: http://www.cccco.edu/Portals/4/AA/2011%20Distance%20Education%20Accessibility%20Guidelines%20FINAL.pdf.

High Tech Center Training Unit

The High Tech Center Training Unit (HTCTU) is a Disabled Students Program and Services (DSPS) grant funded project awarded to the Foothill-DeAnza Community College District and provides 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 HTCTU provide trainings, information, and support in a number of areas related specifically to distance education, including the following:

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

Most of these trainings are held at their state of the art training lab in Cupertino, in a live face to face environment. However additionally, HTCTU 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 HTCTU partnered with @ONE to develop an accessibility training as part of @ONE's certificate program for online teaching and learning: Creating Accessible Online Courses http://www.onefortraining.org/node/421.

In addition to a link to the DE Accessibility Guidelines, the HTCTU website provides a range of resources from manuals to curriculum to specialized lists at www.htctu.net.

Open Educational Resources Initiatives

The enactment of Assembly Bill 2261 in 2008 authorized the California Community Colleges Chancellor's Office to establish an open education resources (OER) center pilot. This bill was adopted without any state funding to support it. In January 2010, the California Community Colleges Board of Governors established the Open Educational Resources Center for California as a statewide pilot program "to provide faculty and staff from community college districts around the state with the information, methods and instructional materials to establish open education resources centers" on their campuses.

Foothill College has managed the center under an MOU agreement with California Community Colleges Chancellor's Office that started in January 2010 and was scheduled to end in December 2012. The FHDA Board of Trustees was provided with information about the MOU on January 5, 2010 (http://fhdafiles.fhda.edu/downloads/homefhda/BOT20100105Item09.pdf).

The Open Educational Resources Center for California (OER) is committed to aiding educators in the state's community colleges in finding, using and developing the best and most affordable open learning materials to meet the needs of their students. The center has provided a structure by which community college faculty and staff in California can locate, scrutinize and customize open educational resources for creating high-quality, free course materials and textbooks for California community college students. These digital learning materials are openly licensed or available in the public domain so that they can be used, shared or customized for classroom and laboratory use.

To date, the OER Center has completed two of its seven goals: 1) Establish an advisory group comprised of representatives from colleges and organizations committed to promoting OER in community colleges; and 2) Identify sources of adequate grant funding to accomplish the pilot project.

Unfortunately during Summer 2010, staffing reductions and changes at Foothill College decreased the amount of time that the college could devote to managing the OER Center. Additionally, in Fall 2010, Foothill College decided to not pursue funding opportunities (Next

Generation Learning Challenge and Department of Labor TAA) for support of OER activities identified by the OER Center. Consequently, Foothill College has requested to terminate the MOU.

The Chancellor's Office is in the process of terminating the MOU and considering the next steps for this innovative project and acknowledges the accomplishments and achievement of Foothill College in developing and implementing the efforts of the project.

The Chancellor's Office Telecommunications and Technology Infrastructure Program (TTIP) provides the statewide license for all campuses to participate in Multimedia Educational Resource for Learning and Online Teaching (MERLOT), which has free online course curriculum, more than 200 open source textbooks and 25,000 learning objects. Online instructors can incorporate these materials into their curriculum.

Affordable Content Initiatives

The electronic textbooks initiative facilitates the purchase of lower cost electronic textbooks and digital content by seamlessly integrating the bookstore and student and course management systems. Electronic textbooks may be purchased at the time of course registration and directly linked to a student's course(s). In addition to electronic textbooks, viable open educational resource options are being explored.

In 2009/10, two districts/six campuses signed up to participate in the CourseSmart Integration pilot. CourseSmart offers currently adopted textbooks in digital format at 51% lower cost than traditional textbooks. CourseSmart was integrated with the bookstore and the Student Information and Learning Management Systems.

The Chancellor's Office is preparing to survey faculty and students about their needs and uses related to digitized content. This survey will help inform decision makers about the direction of future efforts to address affordable content for students, and is being coordinated with both faculty and student senates.

Distance Education Coordinators in the California Community Colleges

The distance education coordinator is the point person at a college. Their role is to serve as the champion of distance education to both internal and external stakeholders.

The coordinator for distance education must consider the needs and interests of students and faculty, and work with the college community to meet institutional goals through the effective implementation of technology-delivered instruction. In addition, they are the contact person for the Chancellor's Office, and should be knowledgeable about specific title 5 regulations for distance education.

Each college has an identified person to serve in this role. These positions change each year and to assist new distance education coordinators in 2004, the Chancellor's Office launched the DEC Online Project website located at http://deconline.org/project.htm.

The site is a collection of information modules designed to help inform coordinators in the system. The curriculum content of each of these modules promotes innovation, responsiveness, competency, and improved performance of DE coordinators and other related personnel by providing policies, resources, demonstrations, models, and research related to distance education issues.

The objectives of these modules are designed to:

- Provide knowledge of general guidelines and models.
- Give support and resources available to new and existing staff.
- Obtain recognition for completion of a program.
- Legitimize the necessity of distance education programs.
- Formalize a network or association with the system needs.
- Establish recommendations for the benefit of the system.
- Develop identified skill sets to manage and support DE programs.
- Provide information on title 5 regulations, guidelines and reporting standards.
- Expand collaboration among various segments in California higher education.

Overview of DEC Online Modules

Module 1:
What is a Distance Education Coordinator?
What skills are needed to work successfully and effectively within the college or district?

Module 2:
What important topics should Distance Education Coordinators know about?

Module 3:
What issues should Distance Education Coordinators be aware of on their campus or district?

Module 4:
Who do Distance Education Coordinators need to know and why is interaction important?

Module 5:
What programs, projects or resources are available for Distance Education Coordinators?
Why are they important?

Using CCCConfer, the Chancellor's Office Academic Affairs Division conducts a monthly meeting of the college's DE coordinators to discuss a wide range of issues impacting distance education in the system.

CCCConfer

CCCConfer is a program supported by TTIP funding at Palomar College and provides system-wide audio and web-based conferencing services. Teach and Confer is a CCCConfer service that provides a live interactive classroom in which faculty can meet with students. Teach & Confer duplicates the classroom experience with lectures, small group discussion and one to one conversations. Students can participate in live conversations, interactive whiteboarding, polling questions, and a text chat area. Instructors can share their desktop applications live with students and navigate them through websites. Classes can be archived for students to review at a later date. CCCConfer also offers Office Hours, where instructors set date(s) and time(s) when students can virtually contact an instructor for questions, discussion and support.

3C Media Solutions

3C Media Solutions and EduStream are supported through a TTIP grant to the Palomar and San Bernardino community college districts.

3C Media Solutions is a digital communications system for broadcasting distance education media and instructional programs for the colleges. 3C Media provides access to educational programs and/or videos to include in distance education courses, records lectures and conferences and provides technical support to instructors who would like to provide video content to their students.

3C Media also provides television programming and production, streaming media resources, podcasting, conference media support, webcasting, lecture capture, and video production services. Media content is delivered throughout the system 24/7, through television and the Internet.

EduStream is a digital repository that provides quality online educational media/content for faculty and staff to use in their online courses and 3C Media supplies technology to broadcast the content. EduStream also provides on-demand support and services to community college faculty, staff and students and enables users to select and watch content and videos on demand.

EduStream and 3CMedia also caption educational media to ensure they are American with Disabilities Act compliant. This captioning is a service provided to all 112 colleges and ensures distance education media is accessible for all students. Faculty and staff link educational media

into their course management systems where students can view it during the online course. Learning objects provide a more interactive learning experience and increased academic rigor. In 2010, EduStream piloted an online tutoring program at pilot colleges. The program streamed live math tutoring sessions which allowed students to view a math instructor, ask a question in real time and have it addressed by the faculty member live. Students are also able to access the archived version of the session after the live event is over for future reference.

Distance Education
Cost Analysis Methods

Since it was first authorized in 1979 in the California Community Colleges, a question decision makers have asked is “Are DE costs comparable to traditional face to face instruction costs?” Fundamentally, there is a desire to know if DE is more “cost effective,” less “expensive,” or more “efficient.” This question while it may be simple in its structure is complex when constructing a response. There are multiple variables when answering this question as well as a need for a consistent framework or construct of analysis which can apply across institutions. To address recent interest in this topic this section of the report will discuss various aspects of comparing instructional related cost across multiple delivery modes.

This section will not address actual comparative cost for an instructional delivery method nor will it make a prediction about the cost effectiveness of one method versus another. These are activities and discussions that are best conducted under other circumstances.

Research has revealed several costing methodologies that have been developed over the last 10 years but this section focuses on two different approaches developed collaboratively by two well respected organizations in the field of educational technology: the WICHE Cooperative for Educational Technology (WCET) developed Technology Costing Methodology Tool and the National Center for Academic Transformation (NCAT) Course Planning Tool. The WCET tool was designed specifically to compare cost across delivery methods and institutions and focuses on developing a common framework while the NCAT tool has at its core a fundamental redesign of the course that put higher activity requirements on the student.

Both of these statements are over simplifications of two extremely more complex methods of critically analyzing multiple instructional variables and multiple organizational layers. There is also no stated preference between the two methods but a presentation of their characteristics and how they are designed to be used. Both methods have case studies examples of various colleges and universities using them to calculate instructional costs. Both types of examples include community colleges.

WCET Technology Costing Methodology

The Technology Costing Methodology (TCM) is the outcome of a project funded by the Fund for the Improvement of Postsecondary Education to the Western (WICHE) Cooperative for Educational Telecommunications and the National Center for Higher Education Management Systems. The purpose of the project was to provide:

> *"…an authoritative costing analysis tool, including standard definitions of cost categories, for institutions and multi-institutional agencies to: a) analyze the costs of instructional approaches that make heavy use of technology; and b) to legitimately compare cost data for different instructional approaches."*

The project produced the *TCM Handbook*, Excel Calculator, and Instructional CD in 2004. The model has not been updated since that time.

TCM is a Tool for Cost Analysis

TCM is a tool for analyzing educational technology costs. TCM is *not* a set of accounting protocols. TCM is *not* a cost/benefit analysis. Since definitions of "quality" and "benefits" vary widely, these determinations are left to the individual campuses that implement TCM with the *caveat* that cost comparisons that do not take quality aspects into consideration can be worse than useless. See graphic on page 54.

National Center for Academic Transformation Course Planning Tool (NCAT)

NCAT is an independent non-profit organization dedicated to the effective use of information technology to improve student learning outcomes and reduce the cost of higher education. NCAT provides expertise and support to institutions and organizations seeking proven methods for providing more students with the education they need to prosper in today's economy. See graphic on page 55.

Course Planning Tool

The course planning tool is a formatted spreadsheet that enables institutions to compare the before costs (the traditional course format) and the after costs (the redesigned course at the end of the development process).

There are a variety of ways to redesign courses using technology to reduce costs. One approach is where student enrollments stay the same but the instructional resources devoted to the course are reduced. Another is to increase enrollments with little or no change in expenditures. In each case, a translation of the savings to cost-per-student can be used for comparative purposes. NCAT's Cost Reduction Strategies summarize the most effective strategies that can reduce instructional costs.

For NCAT fundamental to all of these approaches is moving away from the predominant credit-for-contact mode of instruction. Some redesigns employ a greater reliance on asynchronous, self-paced learning modes while others take place in a traditional, synchronous classroom setting but with reduced student/faculty contact hours. Both rely on shifting faculty time-on-task to the technology or lessening the labor-intensive quality of instruction. In each case, they are designed to transfer the locus of activity from the faculty to the student: the focus is on student problem solving and projects rather than on presentation of materials.

Below is a list of case studies for colleges and universities that have used the course planning tool in the redesign of a course. NCAT has grouped the case studies into five model classifications: supplemental, replacement, emporium, fully online, and buffet.

Supplemental Model

- Carnegie Mellon University: Statistics
- Fairfield University: General Biology
- The University of New Mexico: General Psychology

Replacement Model

- Penn State University: Elementary Statistics
- Portland State University: Introductory Spanish
- The University of Tennessee: Intermediate Spanish Transition

Emporium Model

- The University of Alabama: Intermediate Algebra
- University of Idaho: Pre-Calculus
- Virginia Tech: Linear Algebra

Fully Online Model

- Florida Gulf Coast University: Fine Arts
- Rio Salado College: Introductory Algebra
- The University of Southern Mississippi: World Literature

Buffet Model

- The Ohio State University: Statistics

WCET Technology Costing Tool Principles

The following principles are excerpted from the *TCM Handbook*.

1) The **TCM is a costing methodology** designed with the expressed intent to create a standardized way to compare the costs of alternative modes of instructional delivery (i.e., classroom and various applications of information technology). TCM allows costing data from campus accounting systems to be transformed into a standard format for making cost comparisons.

2) The **TCM is consistent with the Program Classification Structure** (instructional program, research program, community service program, academic support program, student services program, etc.) developed by NCHEMS in the 1960s. As such, it is consistent with higher education financial reporting systems.

3) The **TCM is comprehensive in its perspective on costs**, making provision for all types of institutional costs to be identified and measured (including, for example, capital costs, costs borne by others, and costs of unused capacity).

4) The **TCM focus is on the collection of detailed cost data** related to the instructional and academic support programs and especially related to the use of alternative means of course delivery. The explicit intent of TCM is to allow comparable and reliable estimates of the costs of these alternative modes that can inform campus management decisions.

5) The **TCM provides a set of rules and assumptions** for making specific cost calculations that can be used to assist management decision making. A central component is the use of activity analysis as a way of assigning resource costs to courses.

6) The **TCM incorporates a theoretical model** ("mini-BRIDGE") that serves as both a guide to organizing and interpreting the cost data obtained and an hypothesis regarding the basic cause-and-effect relationships that are relevant for cost comparisons (Jewett and Henderson, 2003). TCM provides the capability of not only making comparisons of the specific costs at a given enrollment level when offering a course by different methods but also provides the user with estimates of the parameters of a cost model that allows comparisons of costs at various enrollment levels.

NCAT Course Planning Tool & Course Redesign

Previous NCAT redesign projects have used a variety of strategies to reduce instructional costs. Here is a summary of the strategies that have proven to be most effective.

STEP 1. ***Identify the enrollment profile of the course.***

Is the course enrollment stable?

Do you want to accommodate enrollment growth?

STEP 2. ***Choose the labor-savings tactic(s) that will allow you to implement the chosen strategy with no diminution in quality.***

Substitute coordinated development and delivery of the whole course and shared instructional tasks for individual development and delivery of each individual course section.

Substitute interactive tutorial software for face-to-face class meetings.

Substitute automated grading of homework, quizzes, and exams for hand grading.

Substitute course management software for human monitoring of student performance and course administration.

Substitute interaction with other personnel for one-to-one faculty/student interaction.

STEP 3. ***Choose the appropriate cost reduction strategy.***

There are three ways to re-structure the course that will reduce costs.

1. Each instructor carries more students. (The instructor may be a tenured full-time faculty member, a temporary instructor, a graduate teaching assistant or an adjunct faculty member.)

This can be done by:

a. increasing size

b. increasing the number of sections that each instructor carries for the same workload credit.

2. Change the mix of personnel from more expensive to less expensive.

3. Do both simultaneously.

Each of these strategies can be used whether enrollment is growing or stable. When enrollment is stable, cost reduction means that fewer resources are devoted to the course. When enrollment is growing, cost reduction means that more students can be served on the same resource base. In each case, the cost-per-student (total resources devoted to the course/total course enrollment) is reduced.

Distance Education

Legislative Analyst's Report on Distance Education in California Public Higher Education

The Legislative Analyst's Office (LAO) is a State of California agency which has been providing fiscal and policy advice to the Legislature for more than 70 years. It is known for its fiscal and programmatic expertise and nonpartisan analyses of the state budget.

The LAO is overseen by the Joint Legislative Budget Committee (JLBC), a 16-member bipartisan committee. The office currently has a staff of 43 analysts and approximately 13 support staff. The analytical staff is divided into ten subject areas: Criminal Justice, State and Local Finance, K-12 Education, **Higher Education,** Health, Local Government, Resources and Environmental Protection, Social Services, State Administration, and Transportation, Business, and Housing.

Background

On October 25, 2010 the Legislative Analyst's Office released a report as a part of its overall 50 year anniversary celebration of the California Higher Education Master Plan on distance education in public higher education. The report looked at a wide range of topics and issues related to distance education and made seven recommendations to the Legislature about what actions it should take related to distance education. As of March 2011 there have been two bills from the state Assembly (AB 626 and AB 851) submitted addressing some of the issues raised in the LAO's report.

In its executive summary, the LAO wrote the following statement:

"Distance education can offer a number of potential benefits to students, faculty, and the state—advantages consistent with the core principles of access and efficiency contained in the Master Plan. For example, distance education can:

- *Make undergraduate and graduate coursework more accessible to students who otherwise might not be able to enroll due to restrictive personal or professional obligations.*
- *Provide opportunities for students attending one campus to find and get credit for courses at other campuses (thereby potentially speeding their graduation).*

- *Allow campuses to increase instruction and enrollment without a commensurate need for additional physical infrastructure (such as classrooms and parking structures).*
- *Make possible statewide collaborations, including "virtual" academic departments that are taught by faculty from more than one campus.*

Recent research suggests that, on average, postsecondary students who complete distance–education courses learn at least as much as those taking the same courses solely via in–person instruction. Yet, research also reveals a gap in retention rates between students in distance education and face–to–face classes, and many faculty (particularly in the state's research universities) remain skeptical of the value and legitimacy of the delivery method."

Summary of Report

The LAO's report is divided into four parts, part one looks at the definition of distance education its evolution and California and national trends. The report described the efforts of the three systems, noting that the California Community Colleges offers the most DE instruction. Intersegmental collaboration in multiple areas such as curriculum development and faculty training/development is encouraged.

In its second part, the report discusses assessing the effectiveness of distance education covering a wide range of topics including: being subject to the same standards as face-to-face courses, research about the similar learning outcomes for distance education when compared to face to face education, and that some faculty still have a distrust of distance education. Issues related to the gap in retention are discussed as well as concerns about academic integrity.

The report's third segment discusses fiscal issues such as cost and funding. It looks at how courses are funded and the fiscal impact on students and campuses. The impact on campuses is reviewed from cost related to instruction, technology, facilities related savings, and savings through collaboration.

The fourth segment of the report asks the question "Where do we go from here" and provides its recommendations which are summarized on page 61.

Summary of LAO Recommendations

- Adopt a standard definition of distance education for the state's three public higher education segments.
- Require the segments to report periodically on student enrollment and performance in distance education courses.
- Require the California Virtual Campus and California State University (CSU) to provide status reports on implementation of a planned online transfer pathways project.
- Establish competitive grants to develop a repository of online course–work that would be made available to faculty throughout the state.
- Require the review of new programs to consider the possibility of the shared distance-education programs instead.
- Require the Chancellor's Offices of CSU and the community colleges to study the feasibility of establishing an online degree–completion program for state residents who started college but never obtained a degree.
- Create a task force to pursue development of a Western Governors University[11] "virtual campus" in California.

[11] Western Governors University (WGU) is a non-profit online university offering convenient, flexible education online. Founded by the governors of 19 U.S. states, WGU offers nationally and regionally accredited online bachelor's and master's degrees specifically designed for working adults. The governors decided that the university would make maximum use of distance learning technologies, would be collaborative among the western member states, and would use competencies rather than seat time as the measure of its outcomes.

WGU was chartered in 1996, was incorporated as a private, non-profit university in 1997, and began accepting students in 1999. It has flourished into a national university, serving over 23,000 students from all 50 states. It continues to receive recognition for its academic model and to enhance its reputation with employers for the emphasis on graduating highly competent professionals.

WGU is nationally accredited by the Distance Education and Training Council. It is also regionally accredited by the Northwest Commission on Colleges and Universities, one of the major accrediting commissions recognized by the U.S. Dept. of Education and the Council for Higher Education Accreditation.

The WGU Teachers College is the first exclusively online university to receive National Council for Accreditation of Teacher Education (NCATE) accreditation for its degree programs that lead to teacher licensure from NCATE.

WGU's nursing degree programs are accredited by the Commission for Collegiate Nursing Education.

The California Community Colleges are currently addressing many of the issues within the recommendations the LAO proposes. For example the California Community Colleges have:

- a formal definition adopted into title 5;
- chancellor reports on the enrollment and performance of distance education students in the system every two years;
- collaborated with each other on course development and other faculty resources for creating DE courses including training;
- 40 percent of the colleges that have 449 DE degrees and certificates available to students;
- developed clearer pathways for DE students; and
- been seeking ways to better use DE to address transfer and baccalaureate degree completion challenges with a variety of four-year college and university partners and would welcome more collaboration with other California public institutions.

Distance Education
Recommendations

The following are seven recommendations to the board of governors of the California Community Colleges regarding distance education. These recommendations are developed by staff as a result of the analysis of data used in the report.

1. The System Should Conduct a Feasibility Study Regarding the Implementation of a Distance Education Technology Fee.

Were the system to implement a distance education technology fee for every distance education course that a student enrolls in, this revenue could be used by the colleges to conduct research and/or implement activities to improve student retention in distance education courses. The board of governors should request a feasibility study regarding the implementation of such a fee, which would then provide the information needed before the board takes further action on such a fee.

2. The System Should Submit a Fund for Instructional Improvement Budget Change Proposal for 2012-13.

The board of governors should submit a Budget Change Proposal (BCP) to fund the Fund for Instructional Improvement (FII) grants at $1,000,000 per year over five-years beginning in 2012-2013, for a total of $5,000,000. These grants would support local college efforts to improve retention in distance education courses. Grant funds could be used for local projects or for collaborative projects involving more than one college.

3. Colleges Should Support the Identification of Educational Pathways for Students Pursuing Degrees through Distance Education.

As colleges work to streamline educational pathways through basic skills, CTE, and transfer, they should also consider how distance education can contribute to these efforts. In addition to provision of individual courses offered through distance education, it may be appropriate for some colleges to develop educational pathways that can be completely followed through distance education courses.

4. Districts Should Adopt Student Authentication Policies for Students Enrolled in Distance Education Courses.

All colleges should develop and adopt district policies identifying student authentication policies and procedures for distance education courses in accordance with the federal regulations and regional accrediting standards resulting from the passage of the Higher Education Opportunity Act of 2008, passed into law by Congress. The growth in enrollments and in the number of educational providers of online learning has fueled concerns about institutions verifying the identity of students throughout the cycle of an online course: registration, participation, assessment, and academic credit.

5. A Particular Focus Should be paid to Issues of Academic Integrity for Distance Education.

Academic integrity is a longstanding issue in higher education, and particular attention should be paid to this issue with regards to distance education. The issue of academic integrity encompasses such issues as cheating or plagiarism, maintenance of academic standards, and honesty and rigor in research and academic publishing. While the issue of academic integrity is not limited to distance education, it has particular importance for a modality where faculty and student are physically separated.

6. Colleges Should be Reminded of Accreditation Requirements Regarding Distance Education

Colleges should be reminded of current accreditation requirements regarding distance education. Existing accreditation policy requires colleges to submit a "Substantive Change Proposal" to the Accrediting Commission for Community and Junior Colleges (ACCJC), Western Association of Schools and Colleges (WASC), when the delivery of instruction within an academic program via distance education exceeds 50%. Recent survey results indicate that colleges are not complying with this accrediting requirement.

7. Colleges Should Conduct a Self Assessment Audit of all of its Student Services for Telecommunications Interactivity.

All colleges should conduct a comprehensive audit of student services to assess how well they are meeting the needs of distance education students. Colleges are now presented with not only the challenges of teaching at a distance but also the challenges of being able to offer students the full range of support and services. A self-assessment audit of the 30 student services currently offered can provide needed information for planning to meet the needs of the distance education student.

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Appendix A

Number of Distance Education Course Sessions by Delivery Method 2005–10

Data Element	Description from Data Element Dictionary	05/06	06/07	07/08	08/09	09/10
#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
#51	**Televised Synchronous**: Two-way interactive video and audio (e.g. videoconference)	428	398	565	527	900
#52	**Televised Synchronous**: One-way interactive video and two-way interactive audio	169	185	194	153	159
#54	**Synchronous**: Other simultaneous interactive medium	124	167	191	216	193
#61	**Asynchronous**: Text one-way (e.g. newspaper, correspondence, web page, etc.)	833	908	1,054	880	712
#62	**Asynchronous**: Audio one-way (e.g. audio cassette, radio, etc.)	17	13	8	8	6
#63	**Televised Asynchronous**: Video one-way (e.g. ITV, video cassette, etc.)	2,361	2,137	1,705	1,452	1,070
#64	**Asynchronous**: Other one-way passive medium	153	166	273	307	3
#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
#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

Gold shows highest two ratings in each column**.**

Appendix B

Importance of Various Areas[12] in Developing Distance Education Courses in California Community Colleges

Area	Very Important	Important	Somewhat Important	Not Important	Total
Faculty compensation	17.1% 19	29.7% 33	37.8% 42	15.3% 17	100% 111
Faculty training	78.6% 88	20.5% 23	0.9% 1	0.0% 0	100% 112
Teaching load	32.1% 36	43.8% 49	16.1% 18	8.0% 9	100% 112
Articulation/Transfer	42.7% 47	41.8% 46	13.6% 15	1.8% 2	100% 110
Regular personal contact between student and faculty	77.7% 87	20.5% 23	0.9% 1	0.9% 1	100% 112
State apportionment formula	27.5% 30	43.1% 47	16.5% 18	12.8% 14	100% 109
Institutional fund/resources distribution	36.6% 41	41.1% 46	15.2% 17	7.1% 8	100% 112

[12] The areas on this table were identified by the a review of the literature and best practices in DE course development and vetted by the ETAC in the development of the DE Programs and Services Survey for 2011.

Yellow shows highest two ratings in each column.

Area	Very Important	Important	Somewhat Important	Not Important	Total
Equipment/facility	30.4% 34	47.3% 53	17.0% 19	5.4% 6	100% 112
Scheduling	30.4% 34	49.1% 55	14.3% 16	6.3% 7	100% 112
Class size	25.9% 29	51.8% 58	17.0% 19	5.4% 6	100% 112
Copyright/intellectual property right	23.2% 26	45.5% 51	27.7% 31	3.6% 4	100% 112
Curriculum development/approval	72.3% 81	25.9% 29	1.8% 2	0.0% 0	100% 112
Technical support	68.8% 77	26.8% 30	4.5% 5	0.0% 0	100% 112

Yellow shows highest two ratings in each column.

Appendix C

Summary of Methods of How DE Faculty Interact With DE Students

Interaction Methods	1	2	3	4	5	Total
E-mailing	**5.0%** 4	**1.3%** 1	**0.0%** 0	**16.3%** 13	**77.5%** 62	**100%** **80**
Meeting face-to-face on campus	**30.4%** 24	**25.3%** 20	**36.7%** 29	**6.3%** 5	**1.3%** 1	**100%** **79**
Faxing materials to/from students	**71.8%** 56	**16.7%** 13	**5.1%** 4	**2.6%** 2	**3.8%** 3	**100%** **78**
Mailing materials to students (Public/Private Postal Services)	**71.8%** 56	**14.1%** 11	**5.1%** 4	**2.6%** 2	**6.4%** 5	**100%** **78**
Telephone meetings (either one on one or group conference calls)	**20.0%** 16	**35.0%** 28	**28.8%** 23	**13.8%** 11	**2.5%** 2	**100%** **80**
Video Conferencing with students (either point to point or multi point)	**32.9%** 26	**29.1%** 23	**15.2%** 12	**12.7%** 10	**10.1%** 8	**100%** **79**
Text messaging	**32.5%** 25	**35.1%** 27	**22.1%** 17	**6.5%** 5	**3.9%** 3	**100%** **77**
Blogging	**21.8%** 17	**23.1%** 18	**42.3%** 33	**10.3%** 8	**2.6%** 2	**100%** **78**
Online Discussion Board	**5.0%** 4	**0.0%** 0	**6.3%** 5	**10.0%** 8	**78.8%** 63	**100%** **80**
Class Chat Room	**8.9%** 7	**13.9%** 11	**27.8%** 22	**38.0%** 30	**11.4%** 9	**100%** **79**

Interaction Methods	1	2	3	4	5	Total
Class Facebook Page	**43.6%** 34	**32.1%** 25	**16.7%** 13	**3.8%** 3	**3.8%** 3	**100%** **78**
Class Twitter Feed	**46.2%** 36	**30.8%** 24	**12.8%** 10	**6.4%** 5	**3.8%** 3	**100%** **78**
Other Social Networking Sites	**35.9%** 28	**37.2%** 29	**17.9%** 14	**6.4%** 5	**2.6%** 2	**100%** **78**
CCC Meet and Confer (Telephone/computer conferencing)	**31.6%** 25	**22.8%** 18	**26.6%** 21	**13.9%** 11	**5.1%** 4	**100%** **79**
CCC Teach and Confer (Telephone/computer conferencing for teaching)	**34.2%** 27	**26.6%** 21	**20.3%** 16	**13.9%** 11	**5.1%** 4	**100%** **79**
CCC Confer Office Hours (Telephone/computer conferencing for meeting with students)	**31.6%** 25	**25.3%** 20	**24.1%** 19	**12.7%** 10	**6.3%** 5	**100%** **79**
CCC Confer Moodle Room (Open source LMS)	**74.0%** 54	**9.6%** 7	**1.4%** 1	**5.5%** 4	**9.6%** 7	**100%** **73**
CCC Call Confer (Telephone conferencing only)	**38.5%** 30	**25.6%** 20	**20.5%** 16	**10.3%** 8	**5.1%** 4	**100%** **78**

Gold shows highest two ratings in each column.

Appendix D

Student Services that are Available via the Internet, Telephone, or On Campus

	Service or program only on-campus	on-campus and other communication technologies	Information available via static web page posting	Student can request or submit information to program or service via an interactive web page	Student can obtain information via the telephone through prerecorded message	Student can request or submit information to program or service using the telephone	Not offered	Total
Student Population Segments Services (International, Minority, Veteran, Alumni, etc)	1.8% 4	34.8% 78	40.6% 91	11.6% 26	2.7% 6	8.5% 19	0.0% 0	100% 224
Transcript Ordering/payment	1.5% 4	31.0% 83	23.1% 62	23.5% 63	8.2% 22	12.3% 33	0.4% 1	100% 268
E-portfolios	1.7% 4	34.2% 82	35.8% 86	19.6% 47	2.1% 5	6.7% 16	0.0% 0	100% 240
Emergency Calls to Landline Telephone	2.0% 5	31.8% 78	21.2% 52	30.2% 74	5.7% 14	9.0% 22	0.0% 0	100% 245
Emergency Calls to Cellular Telephone	40.2% 72	20.1% 36	16.2% 29	11.7% 21	3.4% 6	7.3% 13	1.1% 2	100% 179
Emergency Text Message to Cellular Telephone	11.4% 27	32.1% 76	21.5% 51	19.0% 45	3.8% 9	12.2% 29	0.0% 0	100% 237
Admissions	13.2% 27	36.6% 75	25.9% 53	17.6% 36	1.5% 3	5.4% 11	0.0% 0	100% 205
Registration	7.5% 18	33.8% 81	23.8% 57	19.2% 46	6.3% 15	9.2% 22	0.4% 1	100% 240
Financial Aid	7.2% 14	40.2% 78	14.9% 29	26.8% 52	1.5% 3	6.7% 13	2.6% 5	100% 194
Student Accounts	4.0% 6	49.0% 73	10.1% 15	22.8% 34	1.3% 2	4.0% 6	8.7% 13	100% 149
Course/Program Catalog	2.3% 5	41.3% 90	17.0% 37	23.9% 52	4.1% 9	11.0% 24	0.5% 1	100% 218
Schedule of Classes	2.0% 5	36.6% 90	24.0% 59	19.1% 47	9.3% 23	8.5% 21	0.4% 1	100% 246
Student to Student Communications	4.3% 11	34.6% 89	23.7% 61	24.5% 63	3.9% 10	8.9% 23	0.0% 0	100% 257
Faculty to Student Communications	1.8% 5	31.7% 90	25.0% 71	25.0% 71	5.3% 15	10.6% 30	0.7% 2	100% 284
College to Student Communications	28.2% 49	28.7% 50	19.0% 33	12.1% 21	2.3% 4	8.0% 14	1.7% 3	100% 174
Academic Advising and Counseling	22.5% 38	34.3% 58	14.8% 25	12.4% 21	1.8% 3	9.5% 16	4.7% 8	100% 169
Assessment and Testing (Diagnostic, Placement, & Academic)	26.7% 51	27.7% 53	20.4% 39	14.1% 27	2.1% 4	8.9% 17	0.0% 0	100% 191
Bookstore Services	23.0% 48	26.8% 56	25.4% 53	10.0% 21	3.3% 7	11.5% 24	0.0% 0	100% 209
Library Services	37.3% 66	20.3% 36	16.4% 29	11.9% 21	2.8% 5	8.5% 15	2.8% 5	100% 177
Remediation Services	27.5% 55	25.0% 50	22.0% 44	12.5% 25	3.0% 6	9.5% 19	0.5% 1	100% 200

Retention Services	**34.0% 36**	**10.4% 11**	**10.4% 11**	**3.8% 4**	**0.9% 1**	**3.8% 4**	**36.8% 39**	**100% 106**
Tutoring (Individual & Group)	**28.3% 30**	**11.3% 12**	**10.4% 11**	**6.6% 7**	**0.9% 1**	**2.8% 3**	**39.6% 42**	**100% 106**
Disabled Student Services	**44.0% 66**	**14.0% 21**	**22.0% 33**	**2.0% 3**	**1.3% 2**	**6.0% 9**	**10.7% 16**	**100% 150**
Counseling (Personal)	**38.3% 67**	**18.3% 32**	**25.7% 45**	**6.3% 11**	**1.7% 3**	**8.0% 14**	**1.7% 3**	**100% 175**
Career Counseling & Placement Services	**31.4% 58**	**22.2% 41**	**26.5% 49**	**6.5% 12**	**3.2% 6**	**9.7% 18**	**0.5% 1**	**100% 185**
Ethical & Legal Services	**5.2% 11**	**38.4% 81**	**20.9% 44**	**26.1% 55**	**2.4% 5**	**7.1% 15**	**0.0% 0**	**100% 211**
Financial Planning (Budgeting, Banking, Loan & Credit Card Management)	**10.5% 9**	**20.9% 18**	**2.3% 2**	**9.3% 8**	**1.2% 1**	**3.5% 3**	**52.3% 45**	**100% 86**
Health Services	**15.5% 18**	**27.6% 32**	**8.6% 10**	**12.1% 14**	**5.2% 6**	**7.8% 9**	**23.3% 27**	**100% 116**
Orientation	**11.8% 15**	**33.9% 43**	**7.9% 10**	**13.4% 17**	**5.5% 7**	**7.1% 9**	**20.5% 26**	**100% 127**
Student Activities (Recreation, Leadership, Academics, Religion & Spirituality)	**38.5% 47**	**18.9% 23**	**27.9% 34**	**5.7% 7**	**0.0% 0**	**7.4% 9**	**1.6% 2**	**100% 122**

Appendix E

Student Enrollment and Completion Rate by Age in Distance Education Credit Course Session (Duplicated Headcount)

Age	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10
<18	Completed	6,986	9,571	12,126	16,295	15,574
	Not Completed	4,892	6,647	8,324	10,814	9,000
	Total	11,878	16,218	20,450	27,109	24,574
	Rate of completion	59%	59%	59%	60%	63%
18 & 19	Completed	47,209	57,903	75,824	97,402	112,148
	Not Completed	51,229	61,280	77,670	92,631	95,819
	Total	98,438	119,183	153,494	190,033	207,967
	Rate of completion	48%	49%	49%	51%	54%
20 - 24	Completed	104,921	130,155	164,851	212,068	230,314
	Not Completed	111,298	134,268	163,056	197,209	197,920
	Total	216,219	264,423	327,907	409,277	428,234
	Rate of completion	49%	49%	50%	52%	54%
25 - 29	Completed	50,035	63,059	83,021	110,796	117,689
	Not Completed	45,445	54,930	69,133	88,102	87,134
	Total	95,480	117,989	152,154	198,898	204,823
	Rate of completion	52%	53%	55%	56%	57%
30 - 34	Completed	33041	39,818	50,829	67,924	69,952
	Not Completed	25607	29,626	36,688	47,028	47,479
	Total	58,648	69,444	87,517	114,952	117,431
	Rate of completion	56%	57%	58%	59%	60%
35 - 39	Completed	25,058	30,199	38,702	48,949	48,839
	Not Completed	17,551	20,856	25,224	31,994	30,199
	Total	42,609	51,055	63,926	80,943	79,038
	Rate of completion	59%	59%	61%	60%	62%
40 - 49	Completed	36,117	42,399	51,021	64,868	66,539
	Not Completed	22,396	26,386	30,626	38,279	37,395
	Total	58,513	68,785	81,647	103,147	103,934
	Rate of completion	62%	62%	62%	63%	64%
50+	Completed	16,106	18,988	23,716	31,619	34,942
	Not Completed	10,538	12,505	15,003	19,012	19,697
	Total	26,644	31,493	38,719	50,631	54,639
	Rate of completion	60%	60%	61%	62%	64%
UNKNOWN	Completed	67	49	51	74	86
	Not Completed	49	42	36	67	73
	Total	116	91	87	141	159
	Rate of completion	58%	54%	59%	52%	54%

Appendix F

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
Asian/ Pacific Islander	Completed	40,739	52,311	65,326	81,686	84,400
	Not Completed	29,804	36,327	45,871	53,400	51,799
	Total	70,543	88,638	111,197	135,086	136,199
	Rate of completion	58%	59%	59%	60%	62%
Black	Completed	21,134	25,400	32,703	48,158	46,608
	Not Completed	33,488	38,412	48,891	70,546	63,116
	Total	54,622	63,812	81,594	118,704	109,724
	Rate of completion	39%	40%	40%	41%	42%
Filipino	Completed	10,164	13,114	17,970	22,700	21,694
	Not Completed	10,075	12,171	15,760	17,861	16,335
	Total	20,239	25,285	33,730	40,561	38,029
	Rate of completion	50%	52%	53%	56%	57%
Hispanic	Completed	54,834	69,043	92,843	126,477	141,384
	Not Completed	64,405	80,163	102,662	134,974	140,938
	Total	119,239	149,206	195,505	261,451	282,322
	Rate of completion	46%	46%	47%	48%	50%
Native American	Completed	3,519	4,414	5,347	6,578	5,369
	Not Completed	3,902	4,905	5,697	6,307	5,065
	Total	7,421	9,319	11,044	12,885	10,434
	Rate of completion	47%	47%	48%	51%	51%
Two or More Races	Completed	5,956	7,537	9,022	244	9,861
	Not Completed	5,876	7,141	8,407	261	9,873
	Total	11,832	14,678	17,429	505	19,734
	Rate of completion	50%	51%	52%	48%	50%
Unknown/ Declined to State	Completed	25,850	32,547	43,805	75,977	90,381
	Not Completed	20,820	27,428	36,186	60,855	68,778
	Total	46,670	59,975	79,991	136,832	159,159
	Rate of completion	55%	54%	55%	56%	57%
White	Completed	155,807	185,598	225,268	277,851	279,140
	Not Completed	122,173	142,185	170,146	191,258	186,070
	Total	277,980	327,783	395,414	469,109	465,210
	Rate of completion	56%	57%	57%	59%	60%

Appendix G

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

Disability	Student Outcome	2005-06	2006-07	2007-08	2008-09	2009-10
ACQUIRED BRAIN INJURY	Completed	258	262	305	423	536
	Not Completed	231	306	301	341	456
	Total	489	568	606	764	992
	Rate of completion	53%	46%	50%	55%	54%
DEVELOPMENTALLY DELAYED LEARNER	Completed	145	159	203	190	285
	Not Completed	271	211	230	233	322
	Total	416	370	433	423	607
	Rate of completion	35%	43%	47%	45%	47%
HEARING IMPAIRED	Completed	296	408	443	548	674
	Not Completed	351	387	420	475	548
	Total	647	795	863	1,023	1,222
	Rate of completion	46%	51%	51%	54%	55%
LEARNING DISABLED	Completed	2,167	2,626	3,083	3,698	3,970
	Not Completed	2,310	2,739	3,223	3,385	3,429
	Total	4,477	5,365	6,306	7,083	7,399
	Rate of completion	48%	49%	49%	52%	54%
MOBILITY IMPAIRED	Completed	1484	1,597	1,691	2054	2344
	Not Completed	1471	1,481	1,638	1848	2049
	Total	2,955	3,078	3,329	3,902	4,393
	Rate of completion	50%	52%	51%	53%	53%
OTHER DISABILITY	Completed	2,048	2,542	3,301	4,068	5,417
	Not Completed	2,290	2,785	3,406	4,109	5,303
	Total	4,338	5,327	6,707	8,177	10,720
	Rate of completion	47%	48%	49%	50%	51%
PSYCHOLOGICAL DISABILITY	Completed	1,213	1,467	1,772	2,366	2,986
	Not Completed	1,428	1,706	2,012	2,423	2,760
	Total	2,641	3,173	3,784	4,789	5,746
	Rate of completion	46%	46%	47%	49%	52%
SPEECH/LANGUAGE IMPAIRED	Completed	36	41	66	96	110
	Not Completed	29	50	76	83	103
	Total	65	91	142	179	213
	Rate of completion	55%	45%	46%	54%	52%
VISUALLY IMPAIRED	Completed	274	267	319	410	478
	Not Completed	277	256	343	367	428
	Total	551	523	662	777	906
	Rate of completion	50%	51%	48%	53%	53%

Appendix H

List of Participating Colleges in the Chancellor's Office 2010 "W" Student Survey

College	Number of students
1. Allan Hancock College	715
2. American River College	1,491
3. Antelope Valley College	694
4. Bakersfield College	1,234
5. Butte College	197
6. Cabrillo College	841
7. Cerritos College	2,112
8. Chabot College	1,586
9. Chaffey College	922
10. Citrus College	366
11. Coastline College	2,043
12. Columbia College	231
13. Copper Mountain College	81
14. Cosumnes River College	947
15. Cuyamaca College	1,183
16. Cypress College	1,073
17. Diablo Valley College	1,093
18. East Los Angeles College	711
19. El Camino College	1,243
20. Foothill College	855
21. Fresno City College	369
22. Fullerton College	1,318
23. Gavilan College	229
24. Golden West College	687
25. Grossmont College	1,743
26. Irvine Valley College	588
27. Las Positas College	707
28. Long Beach City College	1,438
29. Los Angeles Harbor College	691
30. Los Angeles Southwest College	413
31. Los Medanos College	219
32. Mira Costa College	1,552
33. Modesto Junior College	1,207
34. Moorpark College	1,909
35. Moreno Valley College	204
36. Norco College	492
37. Orange Coast College	1,023
38. Pasadena City College	887
39. Reedley College	552
40. Rio Hondo College	2,037
41. Riverside College	1,545
42. Sacramento City College	1,113
43. Saddleback College	1,883
44. San Diego City College	1,272
45. San Diego Mesa	1,468
46. San Diego Miramar	1,017
47. San Francisco City College	1,302
48. San Joaquin Delta College	2,308
49. Santa Ana College	795
50. Santa Barbara City College	1,023
51. Sierra College	1,627
52. Southwestern College	604
53. West Hills-Coalinga	452
54. West Hills-Lemoore	609
55. West Los Angeles College	1,846
56. Yuba College	437
Total Duplicated Headcount	**57,184**

Appendix I

Best Practice Strategies to Promote Academic Integrity in Online Education

This list of best practice strategies is based on "Institutional Policies/Practices and Course Design Strategies to Promote Academic Integrity in Online Education," produced by WCET in February 2009 and updated in April 2009. In May 2009, the Instructional Technology Council (ITC) surveyed its membership to invite feedback and additional strategies to enhance the WCET work. This June 2009 document reflects the combined contributions of WCET, the UT TeleCampus of the University of Texas System, and ITC.

Institutional Context and Commitment

1. Establish a campus-wide policy on academic integrity that articulates faculty and student responsibilities.
2. Demonstrate an institutional commitment to enforcing the policy and in supporting faculty and staff in the handling of academic integrity matters.
3. Make information on academic integrity easy to find on the campus Web site, library Web site, department Web site, course within the syllabus and within specific assignments.
4. Include ethics instruction within the core curriculum and/or area-specific within degree plans.
5. Address academic integrity at student orientation programs and events.
6. Encourage faculty to report every suspected violation and act upon it.
7. Secure student logins and password to access online courses and related resources, discussions, assignments and assessments.

Curriculum and Instruction

1. State the academic integrity/academic honesty policy within the online learning environment and discuss it early in the course.
2. Require student engagement with the academic integrity policy. For example:
    a. Ask students for their input on how to create community of integrity at the start of the course. This establishes the students as stakeholders in the community and the process of its formation.
    b. Develop and ask students to commit to a class honor code.
    c. Require students to read and sign an agreement to the campus academic integrity policy.
    d. Write a letter to students about integrity and post it in the course.
    e. Ask students to restate the academic integrity policy (this can also be used as a writing sample to use when

grading and reviewing student work).
   f. Ask students to reflect on the academic integrity policy in the discussion board.
   g. Include a lesson on avoiding plagiarism.
3. Have assignments and activities in which appropriate sharing and collaboration is essential to successful completion. Foster a community of integrity by choosing authentic learning tasks that require group cohesiveness and effort. For example, focus assignments on distinctive, individual, and non-duplicative tasks or on what individual students self-identify as their personal learning needs.
4. Provide students with a course or course lesson on research and/or study skills. Work with library staff to design assignments and prepare materials on plagiarism and research techniques.
5. Include a statement that the instructor reserves the right to require alternative forms and/or locations of assessments (e.g., proctoring).
6. Ask students follow-up questions to assignments such as, “expand upon this statement you made,” “tell me why you chose this phrase, description or reference,” and “expand upon the ideas behind this reference.”
7. Select one or two difficult concepts from the paper and ask the student to restate/rewrite the information.
8. Require students to share key learning from references for a paper or self-reflection on an assignment in the discussion board.
9. Include an ethical decision-making case study within the course.

Faculty Support

1. Incorporate academic integrity strategies into professional development and faculty training offerings.
2. Publish academic integrity strategies and policies in faculty handbook and Web-based faculty resources.
3. Publish guidelines for handling/reporting individual student infractions.
4. Assign a department academic integrity liaison to support faculty.
5. Use a plagiarism detection service.
6. Use Google to search for a unique text string or unique phrase from the paper.
7. Keep student papers filed in the department by topic for reference.

Student Support

1. Define academic integrity and cheating and clearly explain what is considered dishonest and unacceptable behavior.
2. Provide information and examples to help students understand the

difference between collaboration on assignments and cheating, and identify plagiarism. Teach the proper use of citations.
3. State how much collaboration is permissible on each assignment.
4. State what the instructor's expectations are for the students and explain what they should expect from the instructor. For example:
    a. Include a statement in the syllabus encouraging honest work.
    b. Repeat the campus academic integrity statement and provide a link to campus policies.
    c. Describe academic dishonesty
    d. Describe the repercussions for academic dishonesty.
    e. Describe permissible and impermissible collaboration.
    f. Include outside links to information on plagiarism, self-tests and examples.
    g. Include information on acceptable sources.
    h. Include information about the college's writing center, library or other support.
5. Provide a writing style sheet or handbook with information on plagiarism and campus policies.
6. Indicate assessments may require follow-up documentation, questions or assignments.
7. State expectations for the time needed to complete coursework.
8. State whether the instructor/college will use a plagiarism detection service.

Assessment and Evaluation

1. Provide rubrics, or detailed grading criteria, for every 1. assignment at the beginning of the course so students understand how they will be graded.
2. Train faculty on ways to use the settings on the 2. college's learning management system to reduce cheating:
    a. Use a test bank with more questions than will be used on any particular test and have the learning management system pull a smaller number of questions from the test bank.
    b. Randomize the order of answers for multiple test questions so for example, the correct answer for a particular question might be "a" for one student and "b" for another.
    c. Require forced completion on exams so students cannot re-enter a test.
    d. Set a short window for testing completion, i.e. one or two days to take an exam rather than a whole week. Setting a completion time reduces a student's ability to access the test, look up the answer, and re-enter the test. Most test-taking software applications keep track of time on the server, not on the student's computer.
    e. Password protect exams
    f. Show questions one at a time (makes more difficult

for students to copy and paste the test in order to give it to someone else).
   g. Use a Web browser lock-down service during testing.
   h. Check the computer "properties" for the "creation date" and "author" for essay or term paper submissions if students are suspected of submitting work created by someone else.
3. Clarify that students with disabilities and requesting testing accommodations (extended time for completion of examinations and quizzes) must identify themselves to the college's office of disabilities and provide appropriate documentation.
4. Change test items and assignment topics each semester.
5. Emphasize assignments that require written work and problem solving (e.g., essays, papers, online discussions).
6. Use a variety of assessment strategies (quizzes, short and long papers, test questions that require the application of a theory or concept).
7. Adopt the following practices to encourage authentic written work:
   a. Require students to turn in copies of reference articles with cited text highlighted.
   b. Require annotated bibliographies.
   c. Do not allow last minute changes in assignment topics.
   d. Require specific references be used (this might be the course text).
   e. Require an abstract.
   f. Give narrow assignment topics (tied into class experience) and require thesis statements prior to topic approval.
   g. Require students to turn in a draft, and their bibliography or references prior to the paper's due date.
   h. Require students to write a concept paper and h. project plan prior to completing an assignment.
8. Evaluate the research process and the product.
9. After an assignment is due, have students post in the discussion board, describing the assignment and the research method used, a summary of conclusions and an abstract (a meta-learning essay).
10. When evaluating student written work, consider following these practices:
   a. Be wary of student writing that reads like an encyclopedia, newspaper article or expert in the field.
   b. Look for whether a paper reflects the assignment, has changes in tense, includes

odd sentences within a well-written paper, is based on references older than three years, refers to past events as current, or uses jargon.

c. Compare student writing on the discussion board with that on assignments and papers. A writing sample collected at the start of the semester can be helpful.
d. Compare the writing at the beginning and end of the paper with that in the middle of the paper -- language, sentence length and reading level.
e. Check references; compare quotations with cited sources; look for the same author in multiple references.
f. Read all papers on the same topic together.

11. Make assignments cumulative (students turn in parts of a project or paper throughout the semester).
12. Give open book exams.12.
13. Other than grades, do not provide students feedback on tests until all of the students in the class have completed them.
14. Use proctored test sites where appropriate.
15. Faculty should use a robust user name and password to protect their computer-based grade book and keep a printed copy in a secure place in case students are able to hack into the computer system.

Sources

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"Institutional Policies/Practices and Course Design Strategies to Promote Academic Integrity in Online Education," by WCET Working Group on Academic Integrity and Student Verification. February 2009 and revised April 2009.

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Appendix J

Chart of States Regulating Distance Education at a Glance

Institutional personnel often worry about having to apply for approval in every state. To help states navigate through the approval processes, the partnership of the WICHE Cooperative for Educational Technologies, Southern Regional Education Board, American Distance Education Consortium, and the University of Wyoming created the chart on the next page of this appendix. The states are categorized into one of the three following groups:

1. **Red – *Nearly every institution will need to apply.*** The state has specific regulations requiring institutions offering distance education (even without any physical presence) to students within the state to seek approval or licensure.

2. **Green – *Few institutions will need to apply.*** The state has no regulations on this issue or there are specific exemptions. In some states proprietary institutions might still need to apply.

3. **Orange – *It depends.*** If all the institution is doing is offering instruction to the student, then the institution will ***probably*** not have to apply. However, there are several "triggers" which could require you to seek authorization:

Activities
If you advertise in local media, advertise directly to students, require students to take a proctored exam locally, have any employee (including adjunct faculty) in the state, or do anything else in the state, check that state's regulations closely as you might need to seek approval.

Type of Institutions
The regulations for private, public, religious, and tribal institutions vary by state.

Registration or Notification
Even if you are not required to apply, a few states require the institution to register with the state, apply for an exemption, or to notify the appropriate agency that the institution is operating in the state. For a few states, this includes a fee.

The above list is not exhaustive and the conditions that trigger whether you need approval or not vary from state to state. Again, these categories reflect our interpretation. Only a review of each state's requirements will yield the answer for your institution.

Categorization of States Regulating Distance Education

Red Nearly Every Institution Will Need to Apply	Green Few Institutions Will Need to Apply	Orange It Depends
Massachusetts Minnesota Rhode Island	Alaska Colorado Hawaii Idaho Indiana Louisiana New Hampshire South Dakota	Alabama Arizona Arkansas California Connecticut Delaware District of Columbia Florida Georgia Illinois Iowa Kansas Kentucky Maine Maryland Michigan Mississippi Missouri Montana Nebraska Nevada New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Oregon Pennsylvania South Carolina Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming