

Faculty Research Fellows Program

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Concurrent
Enrollment Programs
Between California
High Schools and
Community Colleges

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SACRAMENTO STATE
Center for California Studies

CONCURRENT ENROLLMENT PROGRAMS BETWEEN CALIFORNIA HIGH SCHOOLS AND COMMUNITY COLLEGES

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and
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Public Research Institute
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This report presents findings from a literature review, policy review, and series of interviews with program staff at a number of California Community Colleges and partner high schools, and researchers knowledgeable with concurrent enrollment policy and practice.

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Sincerely,

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EXECUTIVE SUMMARY

As of 2008/2009¹, roughly 150,782 K-12 students were concurrently enrolled in California Community College credit courses, comprising approximately 5% of all community college students and 7.5% of the total high school population of the state. While the majority of FTES earned via concurrent enrollment (CE) is in Liberal Arts and Sciences (80.1%), a sizable minority (16.4%) is earned in Career and Technical Education (CTE). Asian and white students were disproportionately represented amongst CE students, while Hispanic students were underrepresented.

Changes in legislation and a decline in community college enrollments lead to an expansion of CE between 1997 and 2003. The ensuing scandal that broke out over alleged abuses of CE offerings led to a tightening of legislation in 2003 via the enactment of S.B. 338. Legislation since that time has focused on selectively loosening restrictions on CE and pending legislation (A.B. 78 and 555) would greatly expand CE course options.

Recent literature on CE (since 2003) suggests that CE experiences may have a positive impact on student aspirations, high school and post-secondary achievement, and time to degree. However, research on this topic continues to be challenged by a lack of standardized data, inability to differentiate the relative benefits of diverse models of provision, and difficulty in specifying the benefits to specific populations of students, with one recent exception.

Most students who participate in CE programs are purportedly high-achievers who enroll in regular college-level classes on their own initiative. However, some programs offer classes on high school campuses to make them more accessible to “average” students. Finally, a number of colleges offer CE as a part of a comprehensive program, often targeting at-risk youth. These

¹ Including Summer 2008, Fall 2008, Winter 2009 and Spring 2009. Data from the RP Group, September 2009.

latter programs include those that offer students part of their high school instruction on the community college campus so they can also attend college courses and receive support through the transition (middle and early college high schools, “College Connection” programs), and various career-technical models, which provide students with some instruction on the high school campus along with sequenced CTE programming on the college campus.

Interviews with college staff at 15 colleges suggest extensive outreach activities on CE offerings, most of it directed to high school students and staff. However, some colleges have undertaken innovative measures to reach parents, including a promotora model for targeting immigrant parents. Few colleges had specific policies about minors on campus, and few reported professional development addressing the issues of teaching minors or the needs of minors on the college campus, despite ample concern about the ability of these students to transition between levels. Many programs apparently receive little or no outside funding, and cost-sharing with high schools appeared to be minimal in nearly all cases. When programs did solicit outside funding, they were able to provide additional services such as textbook and transportation support and counseling for students.

In preparing this report, we selected four colleges to highlight in case studies. Due to lack of agreement on what constitutes success, and lack of data on student outcomes in these programs, we settled upon identifying “promising practices.” Case studies include Pierce College, which implements one of the largest high-school-based CE programs; Butte and Ohlone Colleges “College Connection” program, which offers some high school programming on the college campus in conjunction with college-level classes, and Santa Ana College, which implements two comprehensive CE programs targeting at-risk youth—an Early College High School and a new CTE program.

RECOMMENDATIONS

Based on the research available, concurrent enrollment appears to provide benefits to students and possible cost-savings and benefits to states. However, the state is currently facing a severe budget crisis, which impedes its ability to provide much-needed funding to ongoing comprehensive and new concurrent enrollment programs. With these considerations in mind, the following recommendations are offered.

- Consider California's future educational and workforce needs and incorporate concurrent enrollment into a comprehensive strategy to meet those needs, focusing on enhancing college readiness, particularly amongst populations with low college participation rates.
- Continue to encourage inter-segmental collaboration and alignment of requirements and programming to support the transition from high school to college.
- Support efforts to expand and standardize statewide inter-segmental data collection on students and student outcomes. Support objective evaluation and training in data collection and use for program staff.
- Comprehensive programs seem to provide special benefits, but current legislation provides some obstacles. Consider providing waivers to 76001(e) for students participating in programs that require that students participate in a certain sequence classes or at a certain level of college coursework to participate; exempt students in more comprehensive programs from the 11 unit cap (76001(d)).
- Add additional waivers to the 5% cap on summer classes (except physical education) (48000(d)(2) to assist rural community college districts in providing needed

programming where school districts may have too few students to offer summer classes.

- Explore relative advantages of programs like College Connection, which follow a model similar to that of the ECHS/MCHS, but at a more limited scale and cost.
- Consider ways to facilitate dual crediting of courses for both high school and college credit (76001(c)).
- Where CE courses are provided primarily on the high school campus, investigate ways of providing additional counseling and advisement as part of these programs so that they can realize the goal of increasing access to college to a broader group of students.
- Consider requiring that families and/or students pay tuition for courses that CE students do not complete or fail.
- Consider setting a minimum age or grade level for minor students on college campus.
- Investigate the pros and cons of funding allocation as experienced by other states and obtain empirical evidence of whether and how these strategies incentivize or disincentivize districts from providing CE offerings.

INTRODUCTION & BACKGROUND

CE programs have historically targeted high-achieving secondary school students by offering challenging curriculums, exposure to college environments, and an opportunity for scholastic acceleration by allowing students to earn college credits while still enrolled in high school.¹

In recent years, California policy makers and educators have debated whether to change existing legislation to expand CE programs by expanding the pool of eligible students to include more at-risk students, and by broadening the focus of these programs to include career-technical training, basic skills remediation, instruction in ESL, and preparation for high school exit exams.

Karp et al. (2007) noted the following benefits of CE:

- Helps low-performing students meet high academic standards
- Reduces drop-out rates and increase student aspirations
- Improves student acclimation to college life
- Increases the academic rigor of the high-school curriculum
- Provides a wider range of academic and vocational electives
- Reduces the overall cost of college by enabling students to earn college credit that is often tuition-free.

Despite some compelling evidence of success, a number of factors have impacted the willingness of lawmakers to change existing policy and expand the scope of these programs. Some educators are hesitant to promote dual enrollment because of the results of a 2003 community college system audit, which uncovered abuses in enrollment and funding practices in CE offerings, primarily in regards to physical education courses.² The worldwide recession that

became apparent in 2008 has impacted this debate in important ways as California in particular struggles with a momentous budget crisis that has reduced funding for public education. Finally, administrators lack reliable evaluation data that would help them establish the comparative costs and benefits of different models of CE.

The overall purpose of this small-scale study has been to determine what constitutes “success” in California CE programs, to identify California community colleges that are utilizing promising practices with regards to CE, and to identify key elements of successful CE programs, including outreach efforts, professional development, funding and program components.

Like researchers before us, we found that many programs lacked specific data on outcomes or the characteristics of participating students. At a few programs, administrators, deeply involved in the dynamics of running their programs, were hard pressed to come up with any definition of success for their program, let alone measures that would indicate that their program was successful. As anticipated, lack of consistent definitions of success, and lack of standardized data across programs, made it difficult to define and select best practices.

One of the colleges that we studied that did keep exceptional data, analyzing student outcomes on multiple levels. The success of this effort is largely dependent on partnerships with other institutions that allow access to shared data because the success of concurrently enrolled students is seen as only part of a larger collaborative effort to enhance student success all the way along the pipeline.

Scope of Provision

In order to better understand the scope of CE programs in California, we solicited data from the California Community College Research and Planning Group (RP Group) so that we could examine the number and proportion of special admits at each community college. We also examined data publicly available via the California Community Colleges Chancellor's Office Data Mart website³, Integrated Postsecondary Education Data System (IPEDS) data from the National Center for Education Statistics⁴, California's Data Education Partnership (Ed-Data) and the California Department of Education's DataQuest sites for information on high schools and school districts⁵.

While California community colleges are not required to offer dual or CE options to K-12 students, in 2008/2009 nearly all 109 colleges had at least some "special admits"² (ranging from 2 to 6,453). According to data from the Research and Planning Unit and the Data Mart³:

- K-12 special admits made up less than 3% of the 2008/2009 total headcount of students at 17 community colleges;
- K-12 special admits made up 15% or more of the 2008/2009 total headcount of students at 27 community colleges.

However, K-12 special admits generally take relatively few units as compared to regular admits. Comparing full-time equivalent (FTES) may provide a better picture of the relative contribution of special admits to the overall community college enrollment. Proportion of FTES ranged from less than 1% to 11%⁴:

² A "special admit" is the classification given to K-12 students participating in concurrent enrollment

³ Data by college from a special run from the RP Group served as the numerator; data from the Data Mart Student Demographics by Academic Year 2008/2009 total headcount served as the denominator.

⁴ Ibid.

- K-12 special admits made up less than 1% of the 2008/2009 total FTES at 23 community colleges;
- K-12 special admits made up 5% or more of the 2008/2009 total FTES at 23 community colleges.

As of 2008/2009⁵, roughly 150,782 K-12 students were enrolled in California Community College credit courses:

- Special admits comprised about 5% of all community college students (150,782/2,897,587)⁶;
- Special admits comprised about 2.8% of all community college FTEs (352,242/1,270,551)^{7,8}

Assuming that all or the majority of these CE students are high school students, this represents 7.5% of the total high school population (150,782 /2,013,687.

⁵ Including Summer 2008, Fall 2008, Winter 2009 and Spring 2009. Data from the RP Group, September 2009.

⁶ Data from a special run from the RP Group served as the numerator; data from the Data Mart Student Demographics by Academic Year 2008/2009 total statewide headcount served as the denominator.

⁷ Proportions developed from special report from RP Group on Special Admit Headcount and FTEs and California Community College Datamart

⁸ Data by college from a special run from the RP Group served as the numerator; data from the Data Mart Annual 2008/2009 Credit Status table served as the denominator.

Course Classification

About 74% of these special admit enrollments in credit courses were in Liberal Arts/Sciences courses, 20% were in Career/Technical Education (CTE), 4% were in Personal Development courses, 1% were in Developmental Preparatory, and 1% combined were in all other classifications.

Table 1. Course Classifications, California Concurrent Enrollment

Course Classification	Total Students	Percent of CE Students	Total FTES	Percent of CE FTES
Liberal Arts/Sciences	117,146	74.0	26,199	81.2
Developmental Preparatory	1,803	1.1	252	0.8
Adult/Secondary Education	42	0.0	5	0.0
Personal Development	5,815	3.7	413	1.3
Substantially Disabled	256	0.2	25	0.1
Parenting/Family Support	15	0.0	1	0.0
Community/Civic Development	145	0.1	26	0.1
General And Cultural	747	0.5	78	0.2
Career-Technical Education	32,430	20.5	5,278	16.4
TOTALS	158,399	100.0	32,276	100.0

Source: CCCCCO Research and Planning Unit

Student Demographics

Fifty-six percent (56%) of these special admit students were female and 43% male, compared to 54% female and 44% male among community college students statewide.

CE students were disproportionately Asian and slightly disproportionately white compared to the statewide population of high-school students. Hispanic students were under-represented amongst CE students.

Table 2. Race/Ethnicity of Concurrent Enrollment Students

	% CA K-12	% CA HS	% CCC Students	% CA CE Students
Asian	9	9	13	17
African-American	8	8	9	9
Filipino	3	3	4	3
Hispanic	51	48	34	37
Native American	1	1	1	1
Pacific Islander	1	1	1	1
White	29	31	39	33
TOTALS	100%	100%	100%	100%

N=	6,041,513	1,966,043	2,527,084	129,513
Source	EDDATA	DATAQUEST	RPGROUP	DATAMART

**Numbers include only those students who indicated a single race or ethnicity. Up to 16% of community college students and 3% of K-12 students indicated no or multiple race/ethnicity.

California Policy Regulating Concurrent Enrollment

The following sections of the California Education Code specify how CE programs between community colleges and high schools may be implemented: § 11300 - 11301, 46146, 48800 - 48802, 76001, 76002, and 76300(f). Additional guidance on the intent and interpretation of the Education Code is provided by a number of California Community College Chancellor's Office Legal Opinions and Legal Advisories.⁹

California Educational Code Sections 48800-48802 provide the basic framework for offering CE courses to high school students on community college campuses, or through community college courses offered on high school campuses and elsewhere. Key to the intent of this legislation is specification of which students may be deemed eligible for CE and for what purposes:

“The governing board of a school district may determine which pupils would benefit from advanced scholastic or vocational work. The intent of this section is to provide educational enrichment opportunities for a limited number of eligible pupils, rather than to reduce current course requirements of elementary and secondary schools, and also to help ensure a smoother transition from high school to college for pupils by providing them with greater exposure to the collegiate atmosphere.”

Eligibility and Pre-Requisites

In order to participate in CE, students must be recommended by their principal, and receive parental consent to enroll at a community college. The principal of a school may recommend a pupil for community college summer session only if that pupil demonstrates

⁹ These include Legal Opinion M 98-17, October 20, 1998; December 29, 2003: Concurrent Enrollment; Legal Opinion O 04-13, August 25, 2004; and Legal Advisory 05-01 January 4, 2005: Concurrent Enrollment.

adequate preparation in the discipline to be studied and exhausts all opportunities to enroll in an equivalent course at his or her school of attendance. However, special admit students may attend non-credit community college courses without any requirement for involvement by the K-12 school district or any need to find the pupil eligible for advanced scholastic or vocational work. (See CCCCCO Legal Advisory 05-01). Recommendation or authorization from school or district staff is a common element of most state's CE policies.⁶

The Education Code does not set specific age or academic standards for participation. It authorizes the governing board of a community college district to restrict the admission or enrollment of a K-12 special-admit student based on age, grade level, or educational assessment, to any course or program (76002). However, a college cannot use GPA alone to restrict admission; GPA can be part of the college's assessment, but "some other assessment instrument, method or procedure would also have to be used" (See CCCCCO Legal Advisory 05-01). Many (22) states require that students be in at least grade 10 to participate in CE programs.⁷ However, relatively few require a minimum GPA.⁸

Credit Earned

The term "concurrently enrollment" is applied loosely, but generally refers to the fact that the student is enrolled at two different institutions at once. For some such courses, students receive "dual credit"—in other words, they receive credit for both high school and college for the same course.

The Education Code leaves it up to the governing boards of the student's school district and community college district to determine how to grant credit for CE classes (48800c and 76001c). California appears to be one of thirteen states that does not specify in policy at what

level credit is to be granted. Prior to 1989, it appears that the California Education Code specified that students would receive community college credit unless the two districts agreed to allow high school credit instead (Legal Opinion M 98-17).⁹

In contrast, twenty-six states' CE policies "specify that dual enrollment students earn *both* high school and postsecondary credit".¹⁰

Tuition and Funding

California community college districts may waive the costs of tuition to part-time special admit students (76300 (3. f.)), and all but one of the colleges contacted for this report did so. However, community college districts may *not* exempt *full-time* special admit students from the fee requirement (See CCCCCO Legal Advisory 05-01). Full-time special admit students are those who are earning more than 11 units per semester (76001d).

School districts may claim full ADA for concurrently enrolled students who attend at least 240 minutes of high school instruction per day, and $\frac{3}{4}$ ADA for high school juniors and seniors who attend 180 minutes of high school instruction per day (46146 b). Community Colleges can claim FTEs for concurrently enrolled students as long as the courses they attend are open and advertised to the general public (76002).

Course and Instructor Requirements

The Education Code does not specify any special credentials for those teaching classes incorporating CE students. Both community college and high school instructors may qualify to teach CE courses. However, in most cases, community college instructors must possess a master's degree in the subject area in which they teach, and high school teachers who want to

teach CE courses must be hired as a community college adjunct, which means they must meet the same requirements as community college instructors.

The Code likewise does not specify the location of courses, which may be offered on the community college campus, on the high school campus, or elsewhere. However, if a class is offered at a high school campus, the class may not be held during the time the campus is closed to the general public (76002.B.3) because the course must be open to the general public.

The nature or quality of courses offered is another somewhat gray area, as will be discussed in the section on legislation history. The Education Code specifies that CE opportunities are intended for a “limited number of eligible students” who would benefit from “advanced scholastic or vocational work” at “the community college level” (48800 a), and the specifications for these courses are described in California Code of Regulations, Title 5, Section 55002(a). Courses taught on the community college campus and including large numbers of regular-admit students may be assumed to be courses of instruction offered at the community college level. However, CE classes offered on the high school campus and composed primarily of high school students may be somewhat tailored to address an audience that is new to college-going culture, although these courses are required to include content that is equivalent to that of courses taught to traditional postsecondary students. CCCO Legal Opinion M 98-17 expresses some skepticism towards the idea that courses designed specifically for the typical high school student would, in fact meet the requisite rigor of a degree-applicable course.

Legislation History

CE legislation is the outgrowth of educational reform policy enacted in the 1960s.¹¹ The following section highlights key developments that impacted recent CE legislation in California.

1996, S.B. 292: Changes to the code enacted in 1996 increased the maximum units of average daily attendance (ADA) that a school could claim for concurrently enrolled secondary students and specified that institutions can only receive state apportionments for special admits who are enrolled in community college classes that are open to the general public.

These changes, and a prior decline in community college enrollments, are credited with an expansion of CE in California Community Colleges.¹² According to a 2003 report issued by the California Community College Chancellor's Office, CE programs in California expanded from 27,500 to 51,000 FTEs during the 5-year period from 97/98 to 01/02, an increase from 2.7% of all system FTEs to 4.9%.

2003, Investigation of Alleged Abuses: Some of this rapid expansion was attributed to practices not in keeping with the intent of CE legislation. The disproportionate growth in the number of FTEs in physical education classes in particular was a red flag. An investigative series by the *Orange County Reporter* in 2002 lead to a full-scale investigation by the Community Colleges Chancellor's Office. Investigators noted that problems fell into three categories a) fraudulent and unethical practices (the minority of cases), and, more commonly, b) violations of various Education Code and regulatory provisions, or c) poor judgment on the part of districts leading to "drifting from their core mission".¹³

Common problems had to do with course sections not being truly open to the public, lack of required parental or K-12 principal's approval for enrollment, and, less commonly, courses designed without the minimum level of academic rigor required for claiming apportionment or overall poor documentation of course offerings and adherence to regulations. Many problems were noted with physical education classes that were made up entirely of special admit students.

While investigators noted some blatantly fraudulent practices, they also noted that lack of clarity in some parts of the law. For example, they noted that what constituted courses that were “reasonably well-publicized” in a way that made them truly open to the public was not well-defined.

2003, S.B. 338: Because of these problems, new legislation was introduced to clarify existing law with respect to the types of CE courses for which community college districts could claim state funding. S.B. 338 (2003) clarified what constituted adequate public notice to ensure that classes were “open to the public”; allowed the governing board of a community college district to determine which high school students would benefit from advanced scholastic or vocational work and to restrict admission or enrollment of special admits based on age, grade or educational assessment; specified that no more than 10% of a community college physical education class could be comprised of special admits, and that these students could not make up more than 5% of the district’s total reported CE. Finally, S.B. 338 specified reporting requirements on the number of FTES claimed by each community college district for special admit students by category and type of enrollment.

In December 2003, the Chancellor's Office issued an advisory to address questions regarding the interpretation and implementation of the law on CE as amended by SB 338.

Crackdown on CE: As a result of the investigation into alleged abuses of involving CE, the Legislature reduced funding for CE by \$25 million in 2003-2003 and tightened statutory provisions.¹⁴ The Legislative Analyst’s Office suggests that as a result of this “crackdown on CE”, the number of high school students enrolled in CCC courses dropped from 100, 000 in 2002-2003 to 16,000 in 2004-2005, accounting for a sizable portion of the enrollment decline experienced by the system during this period.¹⁵

2005-2006, Exemptions to Summer School Enrollment Cap: Existing law currently specifies that for any particular grade level, a principal may not recommend for summer session enrollment more than 5% of the pupils completing that grade immediately prior to recommendation (48800.b.3).

AB 967 (2005) and AB 1303 (2006) both introduced key provisions for exemptions from the 5% cap on summer session enrollment:

AB 967 (2005) exempts a student recommended by his/her principal for enrollment in a college level advanced scholastic summer session course, or in a vocational CCC summer session course, if specified criteria are met, or if the summer session course is offered at an early or middle college high school and provides definitions for “early college high school” and “middle college high school.” This bill also requires authorizes CCC to assign a low enrollment priority to special part-time and full-time students in order to ensure these students do not displace regularly admitted students.

AB 1303 (2006) exempts from the 5% cap a pupil recommended by his or her principal if the pupil who meets one of the specified criteria, including students enrolled in lower division transfer courses, for-credit occupational courses, and seniors taking CAHSEE preparatory classes.

Pending Legislation: AB 78 (2009) would remove restrictions on a K-12 pupil’s ability to concurrently enroll in a number of ways, including removing the requirement that high school students be recommended by their school principal and repealing the 5% summer enrollment cap for K-12 special admits. It would authorize a school district to enter into an agreement with a Community college district to provide secondary pupils who have exhausted opportunities to enroll in equivalent k-12 course offerings to coursework opportunities at a community college.

Analysis of this bill prepared for the Assembly Committee on Appropriations in May 2009 suggests that it would expand CE options to coursework including career technical education, basic skills remediation, high school exit exam preparation, ESL, and dropout intervention—well beyond the original intent of CE as specified in the Education Code: “...to provide educational enrichment opportunities for a limited number of eligible pupils....”¹⁶ Because of concern that the bill might have the unintended effect of reducing course offerings at secondary schools, including basic skills remediation, ESL, high school exit exam preparation and CTE courses, the bill was amended from its original form to specify that a student must have exhausted opportunities to enroll in equivalent K-12 offerings before being allowed to enroll in community college coursework.

Analysis further suggests the annual costs to the General Fund could be \$16-24 million annually, with a 10—15% increase in special admits in statewide.

AB 555 (2009) would enact similar legislation, but as a pilot program between Kern, Long Beach, Los Angeles, Los Rios and San Jose-Evergreen community college districts and local school districts. Analysis suggests the costs to the General Fund of the pilot program would be \$3-4 million annually, with a 10—15% increase in special admits in these 5 districts.

RECENT RESEARCH ON CONCURRENT ENROLLMENT

In an extensive review of the research literature on CE programs published in 2003, authors Bailey and Karp concluded that while interest in CE programs continues to grow and substantial investments have been made in them by many states, the literature provides minimal conclusive research on the actual *outcomes* of these programs (Bailey & Karp, 2003; High School Leadership Summit, 2003). They noted evidence that students like these programs and deem them to be both useful and motivating, but that most literature on dual enrollment programs was largely descriptive, editorial, or anecdotal in nature. The evaluative reports that *were* available were mostly completed by those involved in the programs themselves and tended to emphasize the positive. Because many of these programs were targeted to high achieving students, it was not surprising when studies show that participants tend to fare better (Bailey & Karp, 2003). Measurements used to evaluate student success or satisfaction with program participation varied from institution to institution and program to program, if they were measured at all. Finally, the diversity of models proved to be a challenge in assessing the relative merits of these programs, and many studies did not investigate the comparative merits of different types of CE programs, rather focusing on a single program or using national or statewide data to present aggregate measures that do not take into account differences in program implementation.

In the intervening years since this review article was published, a number of new studies have been conducted on CE programs, some of them by the authors of the review cited above. The following section summarizes this research and any evidence that CE programs produce benefits cited by a prior researchers and advocates, including:

- **Student Knowledge and Aspirations:** Increases or initiates students' interest in college-going; enhances students' understanding of college application and expectations; Improves student acclimation to college life
- **Time and Cost Savings:** Reduces the overall cost of college by shortening the length of time to graduation and enabling students to earn college credit that is often tuition-free.
- **High School Achievement:** Participation in CE enhances graduation rates and decreases drop-out rates; participation increases GPA as compared to either prior HS GPA or in comparison to non-participants.
- **Postsecondary Achievement:** Participation in CE enhances likelihood of college enrollment; likelihood of staying enrolled and graduating, higher or comparable GPA as compared to other students.
- **Special Benefits for At-Risk students:** Assists low-performing students in meeting high academic standards.

Knowledge and Aspirations

Many educators cite enhancement of student educational aspirations as one of the key benefits of CE programs. Some note that students should gain a better understanding of how to apply to college and overall college expectations as a result of participation. Recent studies investigate the impact of CE on student aspirations (Smith 2005) and factors that influence student participation in CE programs (Bartlett, 2008; Brophy & Johnson, 2007).

Smith (2005) used a student survey to examine the impact of participation in CE on student educational aspirations. She found that participation had a significant positive impact on

students' educational aspirations. She also found that the location where the courses were offered was important: students who attended the courses on college campuses had higher aspirations than did those who attended courses on a high school campus. Finally, she found that participation in CE was a stronger predictor of educational aspirations than grades or parental level of education. This upholds earlier research cited in Bailey & Karp (2003) that students who took courses on the college campus took their courses more seriously and noted additional benefits, including a greater sense independence, responsibility and maturity as a result of taking courses on the college campus.

Bartlett (2008) investigated what influenced students to participate in CE in the first place and how they went about developing college goals. Students were reportedly most influenced by parents followed by advisors such as teachers. The material that had the least impact was promotional material from the community colleges. Respondents also indicated little confidence in the ability of high school and middle school counselors to help them understand dual enrollment opportunities or benefits. Nonetheless, respondents felt that they knew a great deal about CE programs and benefits prior to enrollment. Information about tuition-waivers, transferability of college courses, shortened length of time to graduation and ability to realize career goals positively influenced students' decisions to enroll. The author found that students' college goals evolved throughout their CE experience via their participation in the program.

In a similar study, Brophy and Johnson (2007) looked with greater detail into the actual *modes* in which CE opportunities are communicated to students. Using a survey-based design with students in Washington's "Running Start" program, the authors found that most students learned about CE from peers, counselors, parents, teachers, brochures, newspapers, principal, and other sources. While students were significantly more likely to have learned about CE from

counselors, teachers, and other students, learning about CE from these high school-based sources actually decreased the likelihood of participation in these programs. The authors noted the importance of the influence of parents on college-going decisions, again highlighting the importance of outreach to parents.

Time and Cost Savings

In most cases, CE allows students to earn college credits for free, sometimes propelling enthusiastic dual-credit earners directly into their post-secondary educations as college sophomores (Andrews, 2004). Advocates argue that the time and tuition costs associated with the completion of a baccalaureate or associate degree are significantly reduced by CE.

Swanson (2008), McCauley (2007), and Menzel (2006) investigated the effects of dual enrollment participation on timeliness of post-secondary degree completion. The latter study also looked into the associated cost-savings due to the accumulation of free, transferable college credits. Jobs for the Future took a different approach, hiring consultants Augenblick, Palaich and Associates to conduct a cost-benefit analysis of return on investment in early college high schools (2006).

McCauley (2007) used logistical regression with National Education Longitudinal Study data (1988-2000) to demonstrate that college students who had participated in AP or dual enrollment courses were twice as likely to graduate from a four-year university within six years (while controlling for race, gender, and socioeconomic status). McCauley concluded that AP and dual enrollment courses may have enabled high school students to become more familiar with college expectations and gain college credit, and that due to this familiarization students were more likely to graduate from college in a timely manner.

Menzel (2006) also investigated the time and cost savings associated with participation in a CE program in Minnesota. Menzel found that university students who had participated in CE were significantly more likely to complete a baccalaureate degree within four years (or less) when compared with their general university cohort, regardless of the number of college credits earned while in high school. The impact of students' perceptions and aspirations on degree completion were also explored. Participants perceived considerable cost savings due to transfer of college credits earned in high school, although relatively few (32%) actually graduated early as a result, possibly because CE participants tended to choose an enhanced course of college study.

In his review of evidence supporting the success of CE programs, Andrews (2004) cited the results of a study on a cohort of former CE students entering the University of Washington. Forty-one percent graduated within 4 years compared to 31% of regular students. This initiative reportedly saved taxpayers and parents \$37.12 million dollars between \$12.5 million in tuition costs and generated \$24.6 million in tax savings to residents of the State of Washington.

In their cost-benefit analysis of return on investment in early college high schools, Augenblick, Palaich and Associates (2006) used added student earnings and consequent state tax returns over a 15 and 25 year time period to assess the value of CE programs to students, institutions, and states. The consultants determined that early college high schools in California would provide a \$2.11 return on investment in 15 years, and \$3.95 return on investment in 25 years for every dollar the state initially committed. However, researchers found some difficulty in constructing estimates due to lack of consistent implementation and funding structures across sites, and lack of consistent financial tracking data.

In her 2008 study utilizing nationwide datasets from the NCES, Swanson found no statistically significant impact of dual enrollment participation on time to degree or degree attainment, although she did document other positive impacts.

High School Achievement

Despite the fact that interviewees and advocates frequently cite “keeping kids in school” as a major benefit of CE, we found almost no recent published studies examining high school achievement. Karp, Calcagno, Hughes, Jeong and Bailey (2007) found that CE students in Florida were 4.3% more likely to earn a high school diploma, while the subgroup of Career/Technical Education students 1% more likely to earn a high school diploma, than were comparable non-CE students.

Post-Secondary Achievement

Four relatively recent studies explore post-secondary outcomes for CE students and a comparison group. Spurling and Gabriner (2002) compared former CE students with other San Francisco public high school graduates enrolled at a California community college (CCSF); Michalowski (2007) compared former College Now CE students with other New York public high school graduates enrolled at CUNY. Karp, Calcagno, et al. (2007) took a broader approach in examining the influence of dual enrollment participation on students in the state of Florida and in New York City, including a special focus on students in Career/Technical programs. Finally, Swanson (2008) utilized data on a nationally representative sample of students constructed from the NELS (National Education Longitudinal Study) and PETS (Post-Secondary Education Transcript Study) to compare the post-secondary achievement and attitudes of former CE students with other students. All found positive outcomes for CE participants.

Controlling for college placement levels, Spurling and Gabriner (2002) found a statistically significant relationship between prior CE participation and college GPA (2.33 for participants vs. 2.10 for comparison group) and units passed (58% for participants and 53% for comparison group).

Michalowski (2007) used multiple regression analysis with a longitudinal dataset to investigate the impact of CE on three main outcomes variables: credits earned in the first year of college, grade point average in the first year, and persistence to 3rd semester. The author controlled for gender, age, ethnicity, high school GPA and standardized test scores, high school and college attended, and participation in special college programs. College Now participants at CUNY earned more credits on average (.6), had higher average GPAs (.06) and were 4.6% more likely to persist to a 3rd semester than were comparison group students.

Karp, Calcagno, Hughes, Jeong and Bailey (2007) attempted to address some earlier problems with dual enrollment outcomes research by looking at the impacts of dual enrollment on post-secondary outcomes for specific types of students (CTE students vs. other students) and by exploring program effects by race, gender, SES and number of dual enrollment courses completed. Controlling for a number of student characteristics, the researchers used regression analysis to document the following positive post-secondary outcomes for CE students in their statewide Florida sample:

- 7.7% more likely to enroll in a 4-year institution (8.6% for CTE students);
- More likely to persist in college
- Achieved a higher college GPA
- Earned more post-secondary credits three years after high school graduation.

Results were similar, but less consistent, for the New York City sample. However, intensity of participation in dual enrollment, as measured by number of courses taken, did not seem to have any impact on outcomes in Florida whereas it *did* have a positive outcome in New York City. Finally, in the Florida sample, the authors found that in many cases, male and low-income students benefited more from these programs than did their peers.

Swanson (2008) compared the high school and college transcripts of hundreds of students who had participated in dual enrollment courses with those of similar students who had taken no accelerated learning courses, including Advanced Placement. While Swanson found no statistically significant impact of dual enrollment participation on time to degree or degree attainment, she found a number of positive impacts. Dual enrollment students were 12% more likely to enter college within seven months of high school graduation, 11% more likely to persist through the second year of college, and former DE students who completed 20 or more credits in the first year of college were 28% more likely to persist through the second year in college. Swanson also found that dual enrollment participation positively impacted educational aspirations.

Special Benefits for At-Risk Students

Again, although many advocates and interviewees claim that these programs may be especially helpful to at-risk students, few recent studies actually examine the impacts by demographic group. Karp, Calcagno, Hughes, Jeong and Bailey (2007) did analyze their data by subgroups.

Analyzing the data from their larger Florida sample, the authors found that in many cases, male and low-income and low-achieving high school students benefited more from these programs than did their peers.

Male participants were significantly more likely to enroll in college than were female participants, and low-SES participants were more likely to enroll than high-SES participants. However, high-SES participants were still more likely to enroll in 4-year institutions. The relationship between program participation and grade-point average was stronger for male students than for females, and for those from low-SES backgrounds as compared to those from high-SES backgrounds. The authors also found that those participants with the lowest high school grades benefited more strongly in terms of first-year college GPA than did those with the highest high school grades. Finally, male participants were more likely to persist to their second year of college. The authors concluded that male, low-income and low-achieving students “all appear to benefit from participation in dual enrollment to a greater extent than their dual enrollment peers who enter college courses with more social, economic and educational advantages.”

Conclusion

While there is some evidence that CE provides some benefits to students, much research on the subject is inconclusive. Research has yet to effectively compare different modes of provision or provide evidence as to which is most effective, and within what contexts they are most beneficial. It is difficult to control for all mitigating factors socioeconomic status, race, or gender, and different researchers use different definitions of successful outcomes, such as the duration of time over which persistence is measured.

In their 2008 paper “Conducting Research to Answer Your Questions about Dual Enrollment”, Karp and Jeong cite a number of additional barriers researchers face in studying the effectiveness of these programs. These include lack of resources and training to track program outcomes and participants, particularly across institutions. Research is further hindered by the lack of statewide data systems that would allow researchers to conduct longitudinal research across the pipeline. This lack of data limits the scope of research by confining researchers to examining short-term outcomes, or to conducting studies on long-term outcomes without the ability to control for mitigating factors related to subjects’ pre-participation characteristics. Staff members at various institutions and programs may also lack the time and training to conduct rigorous statistical analyses and program evaluations.

DESIGN OF THE STUDY AND DATA COLLECTION METHODS

This study entailed the use of four main data collection methods.

1. A review of policy and a review of the literature on CE
2. A series of key informant interviews with subject experts.
3. A review and descriptive analysis of existing data on California CE programs, their students and faculty.

The findings of the first three data collection components were used to inform the fourth data collection component of the project:

4. Interviews and case studies
 - a. Initial interviews with representatives from 10-12 colleges;

- b. A series of 3-4 case studies on programs/colleges implementing promising practices selected as a result of definitions and criteria developed during the first three activities.

Sample

At the suggestion of a key informant, we solicited data from the RP Group so that we could examine the number and proportion of special admits at each community college. We selected community colleges that had the highest numbers and/or proportions of special admits because we assumed that very large numbers or proportions of special admit students indicated the possible presence of a systematic outreach program. We also solicited suggestions of colleges implementing promising practices from key informants, including the Community College Research Center (CCRC). CCRC had conducted a similar effort in attempting to identify promising practices for the Irvine Foundation Concurrent Courses Initiative (CCI). We did not attempt to profile programs participating in the CCI because they are relatively new and participating in the CCRC research and evaluation.

Ultimately, we narrowed our selection down to 24 community colleges. We then used the web-pages of these 24 schools and any other information provided online to determine if offered any opportunities beyond traditional, self-initiated CE¹⁰ and who to contact regarding CE programs. This process ultimately resulted in a database of potential interviewees for follow-up.

¹⁰ This refers to any student who enrolls themselves in a community college course and subsequently seeks concurrent credit from their primary educational institution (i.e. high school, middle school, etc.) on an individual, course-by-course basis. These students are not part of any coordinated, structured concurrent enrollment program.

Instrumentation

We developed an interview guide consisting of basic questions about each campus' CE program(s) in order to conduct initial interviews with administrators at 10-12 different community colleges. We developed a more detailed guide to follow up with administrators, faculty, and high school partners at 3-4 programs selected for case studies. The text of the interview questions can be found in Appendix A—Interview Guides.

Interviews

Representatives from a total of 15 community colleges were interviewed during the first round of interviews. We were unable to locate or make contact with appropriate staff at 8 of the 23 colleges on our final list.

Upon actual telephone contact with each potential interviewee, an effort was made to determine whether or not they were the most appropriate contact to speak on behalf of the campus' CE program(s). If so, we commenced the interview and if not, we solicited the contact information of a more appropriate administrator. Locating appropriate and knowledgeable contacts was a time-consuming process. There is no consistent title for administrators in charge of CE programs across community college campuses—different departments coordinate these programs at each college, and often several departments within a college may be coordinating their own CE programs.

Case Studies

Initial interviews suggested that few programs kept consistent tracking and outcomes data that could be used to identify “best practices”, even if it had been possible to identify a standard definition of success across programs. Hence, we settled upon identifying “promising practices.”

As we went back through the Round One interviews notes, certain colleges/programs “stood out” as unique. Promising practices identified in the Round One interviews varied and included program scope, outreach efforts, ideology, adaptability, and longevity.

Ultimately, we narrowed down our case study selections to the following programs:

- **Los Angeles Pierce College**—Extensive program utilizing culturally sensitive outreach efforts to bring a large number of course offerings to partnering high schools
- **College Connection**—Two programs, at Ohlone College and Butte College were used in this case study of a unique program consisting of small cohort(s) of high school students on the college campus
- **Santa Ana College**—CE offered through Middle College High School and CTE multiple pathways via an active K-16 Collaborative partnership

Case studies were selected to represent a range of models. Tech Prep programs were not included in the case studies because they use 2+2 articulation rather than CE for granting credit, although we did look for Tech Prep programs that were using or considering using CE. We re-contacted selected programs and conducted additional interviews with program staff, faculty, and representatives from partner high schools.

PROGRAM MODELS

There are several different models of offering CE opportunities. Many CE programs are “programs” in name only; most campuses offer k-12 students the opportunity to take college courses on their own initiative on the college campus, and these enrollments make up the majority of special admits statewide.

Interviewees noted that CE was an important educational strategy because high school students are often unaware of how to make the transition from high school to college and ignorant of the expectations and demands of college life. Students participating in general self-initiated CE were generally acknowledged to be high-performers and/or students from privileged backgrounds with resources to learn this information on their own. However, these students were seen as the exception rather than the rule, hence programs attempting to reach out to students who are less likely to think of attending college have had to adopt a more comprehensive approach.

The following section addresses three basic models of provision, each with substantial variation within the overall general model.

- **College on the High School Campus**—Many colleges offer at least some college classes on high school campuses, often with the majority of the enrollment consisting of high school students. Students can attend these classes after the regular high-school programming is over for the day.
- **High School on the College Campus**—Some colleges offer high school instruction on the college campus in order to make it easier for students to take college classes after regular high school programming is over for the day *and* to introduce students to the expectations and culture of college life.
- **CTE Programs**—A growing number of colleges are receiving funding to provide career and technical education via CE. This might entail transporting students from local high schools on weekends or on weekdays

after regular high school programming is over for the day to attend specific career/technical courses on the college campus.

College on the High School Campus

Many community colleges provide more or less extensive CE opportunities on high-school campuses. Santa Monica College had a very large program covering 73 classes at 32 schools in 2007 before changes to the education code limited it to providing services to its corresponding school district. It currently offers six classes at two high schools. Many of the schools it formerly worked with are now served by colleges in the LA Community College District.

LA Community College District accounts for about 18% of all special admit students statewide and several colleges in the LACCD provide extensive high-school campus programs, including LA City College, West LA, LA Valley and Pierce College. The latter conducts what is purportedly the largest such program in the country, providing approximately 130 classes per semester for approximately 3,270 students at 14 different high schools.

These programs tend to work closely with their partner high schools to develop course offerings and identify facilities for instruction.

The primary benefit of this type of programming is accessibility. High school students do not need to leave their high school campus to take a college level course. High school students, particularly low-income students, face transportation barriers to taking courses at college campuses. One college contact noted that high school students also faced safety concerns, particularly in crossing from one community to the next on public transportation due to concern about gang activity and being perceived as an outsider who could be challenged. Faculty reported that students who would never previously have considered college to be an option

became excited about going to college through attending these courses. Finally, funding cuts have meant that many high schools cannot offer certain classes in high demand amongst high school students, so community colleges can step in to fill the void.

One of the major drawbacks to this model of provision has to do with validity—do students truly gain a college experience from taking a course on a high school campus? For some programs, the majority to *all* of the participating students are high school students. Special admits may not be interacting with regular admits in a college environment and may also be less likely to take these courses seriously as a result.¹⁷ Reports from the field are mixed: one interviewee reported that her program’s high school sites served almost as satellite campuses, drawing many adults from the local community to take college courses closer to home, and another reported that some of their classes on the high school campuses were so popular with adults, high school students, because of their lower enrollment policy, often could not get in. However, one interviewee noted that many of his college’s high-school-based courses had up to 50% CE students, and that some of these students acted so immature, adult students sometimes complained. Another had a policy of calling adult students who enrolled in these courses to inform them of exactly where the courses were being held so they would be prepared. Finally, one district had interpreted Section 76002(b) of the education act as authorizing colleges to disallow adult students in high-school based classes, suggesting that adult students who attempted to enroll in these courses be asked to identify an appropriate course elsewhere, noting: “there has never been a case when an adult attempted to enroll into a high school class and adults typically do not enroll into a high school class.”

Some CE programs that use this model offer little in the way of counseling and support services. Instead, their resources are largely devoted to course implementation. Community

colleges that offer a large number of courses on high school campuses need to fill the seats in those courses and thus devote much of their efforts to community outreach. Certainly, these programs provide opportunities for academic advancement to countless students—but once the students are actually participating in CE, is there enough support in place for them? The administrators of one program expressed concern about this lack of support, noting that could be an area of opportunity for their program.

The “captive” audience may give college high-school outreach staff opportunities to provide high school students with additional counseling and instruction in college-going expectations and resources. An administrator at a smaller program noted that one could pretty much assume a sizable number of high school students in each of these classes and use the first couple of sessions to provide orientation material and assist students with campus paperwork. Nonetheless, colleges were leery of providing this additional information in classes because a) they want students to experience college-level classes without any special “tailoring”; and b) they are concerned that doing so would give the appearance that these classes are not truly open or directed to the general public.

High School on the College Campus

There are at least three types of programs that provide high school classes on the college campus so that students can take CE courses after regular high school instruction: middle college high schools, early college high schools and “College Connection” programs. This model is intended to facilitate a more seamless transition from high school to college and avoid some of the transportation difficulties inherent in pursuing classes at two different locations in a single day. Other benefits to this model include providing students with exposure to regular college

programming and expectations, and the chance to intermingle with regular college students in the college environment. Finally, since high school students in these programs can be assumed to be taking college-level courses as well as high school courses, faculty and counselors have the opportunity to provide additional counseling and assistance in understanding enrollment processes, course selection, and college expectations.

Drawbacks may include faculty and staff resistance to the presence of large numbers of high school students, particularly young high school students, on the college campus. Comments from several interviewees suggested that there has been concern over some students' maturity level, and fears that the presence of MCHS students in particular might cause problems.¹¹

Finally, early and middle college high schools are more expensive than regular high schools, costing 5-12% more than a regular public high school¹⁸ and depend on significant public and/or private funding. However, as indicated in a cost-benefit analysis prepared for Jobs for the Future, investment in early college high schools may yield \$1.33-2.11 to every dollar invested in a regular high school over a 15 year time period.¹⁹

Early College/Middle College High School

Middle College High Schools are comprehensive high schools located on or near college campuses. They are authorized to grant high school diplomas in their own name. They are usually small exist to nurture a college-going ethos amongst students that have been historically been underrepresented in colleges, including first generation college students. Students in grades 9-12 attend high school classes and activities on the college campus and have the opportunity to

¹¹ On several occasions, we heard that campus staff had attributed campus graffiti to MCHS students and that in some instances campus employees had concerns about "urban youth" with attendance and other problems showing up on their campuses.

attend college classes free of charge. This model was developed at LaGuardia Community College in New York City in 1974.

Two pilot programs inspired by the LaGuardia program were started in California in 1988 with state funding. These programs were located at Los Angeles Southwest and Contra Costa community colleges. Two bills were introduced in 1996 (AB 1641 and 2336) seeking to promote a statewide system of middle college high schools in California. However, it was not until 1997 that AB 1106 became law (Chapter 11300 of the Education Code), requiring that the California Community Colleges and the State Department of Education “collaborate to ensure the continued success of existing Middle College High Schools (MCHS), and to promote the establishment of new schools.”²⁰

Today there are 14-15 middle college high schools in California. Thirteen receive state funding. One of the pilot programs (Los Angeles Southwest) no longer receives state funding, and a third program at Foothill College is funded out of an alternative source. The 13 state-funded MCHS serve approximately 2,000 students annually. Participating colleges must provide a dollar-for-dollar match, and the high school partner also generally makes a significant contribution. The state grant amount is \$127,000.

Early College High Schools are a further refinement of the MCHS model. They provide a coordinated course of study but differ from the MCHS model in that they require greater amount of college course work and a greater degree of secondary-postsecondary integration. Early Colleges also have a defined and structured program that enables the high school students to earn both their high school diplomas and their Associates Degree in 4 to 5 years with no cost to the student.²¹ Many of these schools were started, or were re-designed, via the Early College High

School Initiative, which began in 2002 with start-up funding from the Bill and Melinda Gates Foundation.

The goals of these programs include reducing high school dropout rates by improving academic skills and self esteem and enhancing transfer rates, student retention, persistence and career opportunities.²² Attendance rates for these schools nationwide average over 90%, and students outperform students in their districts on state mandated math and English language exams.²³ As of 2009, 85% of graduates had earned at least a semester of transferable college credit or an Associate's degree, and more than 60% of graduates had been accepted to four-year colleges.²⁴

Twenty-nine of California's 109 community colleges host approximately 38 early college high school programs as a part of the nationwide Early College High School Initiative funded via seed money from the Bill & Melinda Gates Foundation in partnership with the Carnegie Corporation of New York, the Ford Foundation, and the W.K. Kellogg Foundation. Jobs for the Future coordinates the Early College High School Initiative and provides support to the partners. The Foundation for California Community Colleges serves as an intermediary for this funding for about 22 of the California programs, but other intermediaries working with California partnerships include:

- Middle College National Consortium (5 schools)
- Woodrow Wilson Fellowship Foundation (6 schools)
- Gateway to College National Network (1 school)
- National Council of La Raza (2 schools)
- Gateway to College National Network (1 school)
- Center for Native Education (1 school)

- Mountain View – Los Altos (MVLA) High School Foundation (1 school)¹²

Several of these programs are re-designed middle-college high school programs or incorporate elements of both. Early college high-schools differ from middle college high-schools in that they provide a coordinated course of study and a greater degree of integration between secondary and post-secondary work.²⁵

College Connection

This is a single-year program targeting high school seniors. It appears to have been initiated at Butte College in 1990 by a Mike Rocklein, a counselor at Paradise High School. This model was adapted in 1994 by Shasta College and by Ohlone College in 2005.

College Connection is similar to the middle-college high school model in some respects, but offers on-campus instruction only for high school seniors. Like some middle-college high schools, College Connection programs seem to target students who have potential but are not doing well in high school or no longer feel that high school is the right environment for them. Two programs note that they take students with GPAs ranging from 1.8-4.0.

Shasta's program is "integrated" across schools and districts, while Ohlone and Butte must work separately with each of their participating districts. This leads to somewhat different models of the high school component.

- **Shasta** can draw students from each of its eleven partner high schools to participate in its three senior year classes: American Government, Economics, College Writing & Research, and Study Lab. Students attend a College Connection class from approximately 8-9 am, then they attend high school classes

¹² This middle college high school appears to be funded by the MVLA Foundation via donations.

until afternoon, after which they may attend college classes. Shasta has 4 high school faculty and about 120 students.

- **Butte** works with 3 school districts, each of which must provide teachers for its own students due to different requirements within the different districts. Students must attend a “facilities lab” for an hour in the morning, and then work on independent study packets in Government, Economics and English to make up the rest of their high school requirements. After the morning session, students may take college classes. Butte has four faculty (2 for one district; 1 for each of the other two districts) and about 140 students.
- **Ohlone** is similar to Butte in that students must work with an instructor from their own district. Ohlone works with 2 districts and has about 50 students a year. Students attend high school classes with their instructor from about 8:15-12:30 every school day, and then they may attend college courses. Ohlone has 2 faculty—one for each district.

In all programs, students reportedly receive a great deal of one-on-one counseling from instructors and instruction on the dynamics of applying for and attending college successfully.

Programs do not appear to receive any additional funding. While neither Butte nor Ohlone charges the special admits tuition for college classes, Shasta does.

Shasta also utilizes a different model of administering and funding its College Connection program. The Shasta program is a consortium between 11 high schools and the college; the college provides office space, in-kind space for classes, and supplies. Each district pays a proportion of their ADA to the program proportional to the number of students from the district

that participate. One school district administers the program and that district receives 3% of the funding for administration

One challenge to implementing these programs has to do with how the programs are structured. While Shasta can draw a few students from each feeder high school to fill each of its high school component classes, Butte and Ohlone are limited to recruiting students only from specific districts or schools for each teacher. One principal at a partner high school noted that he was having difficulty recruiting enough students to justify the partnership. He noted that potential College Connection participants have just become comfortable in the high school environment, and that although he and his colleagues know that College Connection will be a successful, positive, appropriate experience for targeted students, it is difficult to convince them to “leave the nest.” This situation is exacerbated by the fact that there are also some CE courses offered on the high school campus, which may be drawing from the same pool of students. In the future, he hopes that his district can collaborate with neighboring school districts to ease the requirements of their LEAs, allowing for multiple cohorts of College Connection students across districts.

Another challenge has to do with the perception of competition with Advanced Placement (AP) classes and other special programs at the home high schools. Two interviewees noted that there was some concern amongst colleagues about the College Connection “ruining” the AP courses by taking “all our kids”, and some faculty have expressed concerns about losing faculty positions as a result. Again, this problem may be somewhat alleviated in programs drawing a few students from across many high schools.

Career/Technical Education Programs

A number of programs across the state focus on providing high school students with opportunities to focus on career technical education (CTE) as part of their academic work. Many of these programs incorporate college credit as an element. These programs include the California Partnership Academies, Regional Occupation Programs and the nationwide Tech Prep program.

The first two programs may include some college credit options, but most, if not all, of the programming is offered in the form of high school courses on the high school campus or at business facilities.

College credit is a *central component* of the Tech Prep model. Tech Prep is “an articulated, planned sequence of study beginning in high school, and extending through at least two years of postsecondary education or an apprenticeship program.”²⁶ There are 80 Tech Prep consortia in California and all community colleges participate. Most Tech Prep programs grant college credit to participants when they matriculate at the partner college in their CTE program of study. Tech Prep is funded by the federal Carl D. Perkins Career Technical Education Improvement Act (Perkins IV), and California’s current round of Tech Prep funding continues through 2012.

Tech Prep’s traditional 2+2 model of granting “credit in escrow” has sometimes been problematic in that students may only be able to claim college credit for participation at the partner college, and many evidently do not continue on or claim their credits.²⁷

Alternatives: Because most Tech Prep programs in California utilize 2+2 articulation rather than CE to grant college credit to participants, they are not a focus of this report. However, the Tech Prep model and experience have led to new initiatives to provide CTE programming

that provides seamless transition for students via CE, drawing on some of the elements of Tech Prep or incorporating CE into existing Tech Prep programs.

Like Tech Prep, concurrent-enrollment CTE programs require a close partnership between secondary and post-secondary partners to plan and develop curriculum and train faculty to implement the curriculum effectively. Hughes, Karp, et al. (2005) identified the following advantages of a CE model of CTE pathways:²⁸

1. **Easier Credit Transfer:** Because CE students are, by definition, enrolled in college at the same time they are enrolled in high school, they earn transcribed credit while they are in high school. This credit may be transferrable to other institutions besides the partner institution
2. **College Support Services:** Students may have access to college-level libraries and to career and academic counselors that better understand their coursework and can provide better counseling related to the student's CTE path than high-school level counselors. Students may gain a better introduction to college expectations and experiences than if they did all of their initial CTE coursework on the high school campus.
3. **Prestige:** College-level courses may provide rigor to CTE programs.

The authors note one drawback to providing CTE through CE: high school students might have to meet the more stringent entry standards required by some community college classes, which might limit access.

Funding CTE Pathways: Aside from the Perkins funding for Tech Prep programs, there are several other sources of funding for career pathways development. For the most part, this funding does not target CE programs, but allows CE as an option in implementing CTE pathways.

One major source of funding at the state level is **SB 70** funding, or the Governor's Career Technical Education Pathways and Workforce Development Program. In 2005, the legislature approved \$20 million a year to fund this program, which is meant to improve career pathways between high schools and community colleges. Funding is planned to increase to \$56 million per year through 2013-14. However, all funding is subject to year-to-year budget negotiations and this funding level is currently being revised. Fifty-two colleges or districts received CTE Pathways Community Collaboratives funding in 2008/2009. This funding may be primarily focused on high-school level career academies—but some programs are utilizing SB 70 funds to implement programs incorporating CE.

Another major source of additional funding for CTE programs between community colleges and high schools in California is the Irvine Foundation Multiple Pathways program funding. The James Irvine Foundation is a philanthropic nonprofit organization established to benefit the people of California. Two major recent initiatives funded by the Irvine Foundation include:

1. **The Concurrent Courses Initiative:** “The Concurrent Courses initiative was created to demonstrate the feasibility of using dual enrollment to strengthen college and career pathways for students. The initiative provides funding and technical assistance to support partnerships between high schools and community colleges. These partnerships will expand supportive and challenging career-focused dual enrollment opportunities for students who are historically underrepresented in higher education.”²⁹ The Concurrent Courses initiative is managed by the Community College Research Center (CCRC) at Teachers College, Columbia University. This \$4.4 million initiative runs from 2008 –

2010. Nine California community colleges in 8 different partnerships were funded to take part in this program.

2. **The Multiple Pathways – Multiple Pathways Through Regional Collaboratives:** The California Multiple Pathways Initiative was established to help California school districts develop and implement plans for expanding multiple pathways in their high schools. As a part of this initiative, the Irvine Foundation provided the Alliance for Regional Collaboration to Heighten Educational Success (ARCHES) a special \$1.5 million grant to sub-grant to regional collaboratives to plan and implement a multiple pathways approach to educational achievement. ARCHES funded six existing regional collaboratives to plan and implement a multiple pathways approach in secondary schools over three years. This funding ends in 2011. Santa Ana College is part of the only collaborative implementing a CE model of pathways via this funding.

It is unclear how many programs statewide are utilizing SB70 funds for concurrent-enrollment related CTE programs and how many Tech Prep programs may be exploring CE as an alternative to 2+2 articulation. Interviewees from three colleges contacted for this project mentioned using SB 70 funding to provide resources for planning/articulation, student transportation, counseling and books for students in their CTE-focused CE programs.

Implementing CTE Pathways: Two colleges contacted for this study are in the process of developing CTE programs utilizing CE. Representatives from Santa Ana described a model (Career Academy Scholars Program) that includes an academic curriculum implemented on the high school campus during the early part of the day, followed by afternoon CTE courses on the college campus. Because this is a program split across campuses rather than offered solely at the

high school or college campus, the program provides students with bus passes and special scheduling to allow them to move between campuses.

Modesto Junior College has a number of CTE initiatives, including a program called the Modesto Technical School, which is a partnership with Modesto City Schools and Robert Elliot Alternative Education Center. This program targets at-risk youth from the local alternative education high school. The program used to accept 60 students per semester but has now been scaled back to 32 students per semester who take CTE classes on the college campus in any one of 8 different technical career fields including welding, automotive technology, graphic design and lithography and printing.

PROGRAM COMPONENTS

The following section summarizes findings across campuses about different program components, including some consequent challenges to implementation.

Outreach Efforts and Recruitment

Colleges use a wide variety of outreach methods to make students aware of CE offerings on their campuses. Some campuses have had an explicit goal of expanding their CE programs³⁰. Campuses may conduct outreach via providing information to high school staff, directly to students, to parents, or some or all of these three.

However, outreach may be changing as enrollment caps and budget cuts make CE more difficult for community colleges. As one interviewee was told by her campus administration “Your number one goal is to not get more CE students.” It is important to note that CE has served as a form of outreach for colleges, which benefit not only from the FTES from CE, but may use CE as a recruitment tool to retain students after high school graduation.

Many programs have a high school/community outreach program that conducts outreach on behalf of CE and other programs, but the high school and/or program staff often conduct their own outreach.

It is important to note that one campus we contacted had a very large number of CE students, but reported no specific outreach. Word of mouth and a relatively affluent and well-educated district population have created a situation in which there is great demand for providing high school students with early college experience.

Online Resources: Websites for most of the colleges contacted for this study had clear pathways from the initial home page to additional information on CE via either a) programs for high school students specifically, or b) programs for “future students”, including additional information for high school students. For instance, Butte College’s home page clearly directs readers to the section on high school opportunities (see <http://www.butte.edu/>).

However, this was not the case for many colleges investigated for potential inclusion in this study. We looked at websites from every college in starting this study. In many instances, it was difficult to determine whether CE programs were offered at all because of difficulty navigating colleges’ websites. Sometimes CE opportunities were listed clearly under High School Outreach sections, but often information on general CE could only be accessed via links on a page related to enrollment and/or Admissions and Records. Some pages on opportunities for high school students offered basic information, but no contact information. Information on Middle College High Schools and Tech Prep programs were sometimes listed on entirely separate pages not linked to high school outreach pages.

Students thinking of applying for college frequently use the internet as their primary source of information, especially if they do not have friends or family who have attended the

school in question. Fortunately, students are probably generally receiving outreach information from other sources.

Outreach to School Staff: Most colleges and programs worked fairly directly with local partner schools to promote CE programs. The amount of involvement depended on the complexity of the program. College staff reported providing CE application materials to high school counselors as part of a packet of information about college opportunities. Most programs also held informational sessions with assembled groups of counselors from partner schools that included information about CE.

In College-Connection-style programs where faculty from particular high schools were stationed on college campuses, faculty often reported to local administrators and school boards about the progress of their programs. In more complex, multi-year programs, or programs offered on high school campuses, college and high school staff had to work together closely to develop articulation agreements, pathways or course sequences, and/or individual courses.

Outreach to Students: CE programs often exist within a suite of outreach programs intended to enhance college-going behavior in K-12 students. Some programs grant minimal CE credits to students in programs where such enrollment is not the key component of the intervention. For instance, Butte has outreach programs targeting at-risk youth, particularly migrant youth, where students earn a unit of college credit for participation in college preparatory programs meant to spark interest amongst potential first-generation college-goers by bringing them onto the college campus.

A number of contacts mentioned sending speakers to high school classes, college fairs and general assemblies to talk about CE. One contact mentioned including the CE students themselves in this process.

Pierce and West LA have staff onsite at high schools partially because they provide college courses on the high school campuses. Pierce and Santa Ana contacts mentioned frequent visits to partner high schools for outreach purposes. Santa Ana took part in a special initiative to place Higher Education Centers (resource centers) on each high school campus and sent outreach counselors to these centers to counsel students about educational opportunities on the SAC campus.

Outreach to students might also be more targeted—for instance, counselors might refer students to specific programs like College Connection or Middle College High School if they thought it would benefit them. Recruiting for Middle College High School was, of necessity, targeted to eighth graders, while recruiting for College Connection was targeted to 11th graders.

Outreach to Parents: Outreach to parents was less commonly mentioned. Several interviewees mentioned providing information to students and/or counselors and expecting the students to take this information back to their parents. One interviewee noted that he was getting an increasing number of inquiries from high school parents about how to save money on college, and he was recommending CE as one method of doing so. Considering research on the impact of parents on students' educational choices, parent outreach might be a particularly effective method of enhancing student participation.

The primary mode of parent outreach appears to be informational flyers and/or letters and parent orientation nights.

- San Mateo Community College District at one point mailed brochures to the homes of all students in the district. The brochures provided information on the community colleges and CE opportunities and invited parents to an orientation meeting.

- High School faculty involved with the Butte College Connection have sent information to parents of high school students at a partner school inviting them to an informational parent night on their program and manned booths at the college's Family Day in order to talk to parents about their program.
- Staff and faculty involved with Ohlone College Connection have conducted outreach via parent nights, and have conducted targeted outreach to Hispanic parents' associations.

Some campuses have also used the local media such as newspapers and public radio as an effective method of reaching out to the community.

Finally, a number of campuses conduct bilingual outreach with parents from many different ethnicities. For instance, Pierce has worked with providing information to parents in Spanish, imparting information to students about AB 540 (rights of immigrant students) and financial aid, and in Farsi.

- Santa Ana College works through the inter-segmental Santa Ana Partnership to provide one-on-one bilingual outreach to parents via a cadre of secondary school parents, Padres Promotoras, who go to the monolingual speaking homes of high school students and educate parents about the programs that are available to their students.

Campus Policies

Contacts were asked whether their campuses had formal policies around CE and/or minors on campus. Answers varied, with most interviewees reporting on specific admissions requirements and enrollment policies for special admits. A number of interviewees noted that

their campuses were limiting who could apply for CE due to budget cuts, and one college had formed a CE policy group to examine and revise their CE policies to ensure that special admits did not displace regular admits. A few had, or were looking at, setting age or grade limits for special admits—for instance—two colleges had discontinued offering CE for students under 10th grade, and another requires students in grades below 9th grade to pay full tuition. Many require students in grades below 10th or 9th to obtain special permissions in order to attend. Several interviewees expressed concern about the appropriateness of very young students on college campuses.¹³

Formal policy documents may be more in evidence at the district rather than at the college level. For instance, San Mateo Community College District put out a 2007 white paper on CE, Enhancing “High-School-to-College” Success: Enhancing High School and College Partnerships in San Mateo County” outlining the districts’ policy on CE, statistics on student outcomes, and the district’s interpretation of statewide CE regulations. No interviewees mentioned the 2006 “Minors on Campus” report prepared by the Academic Senate for the California Community Colleges, despite the fact that members of the educational policy committee that drafted the report came from some of the colleges contacted for our study.

Professional Development & Staffing

Few colleges appeared to offer any special training for college faculty for working with special admits or minors, even in the situations where the bulk of instruction was provided on high school campuses to classes composed primarily of minors. The suggestion that such training should be provided seemed to cause discomfort for most of those we interviewed. Several

¹³ Campuses implementing courses on high school campuses noted that their concerns had more to do with issues surrounding bringing adults onto high school campuses.

interviewees were concerned that such training would be perceived as requiring faculty to tailor their classes to a particular audience, interfering with academic freedom and invoking resistance from faculty and/or violating Education Code Section 76002, which specifies that the class be open to the general public and not targeted specifically for high school students. Finally, a number of interviewees felt that providing such training would be discriminatory or bias faculty against special admits. Many noted that these students should be treated the same as any other student, and that part of the student's learning process was to experience college like any other college student.

Those programs that did provide professional development in this area were those working with career pathways or programs that required a specific sequence of courses that needed to be developed in conjunction with administrators and faculty from both secondary and post-secondary institutions. While these sessions might not be formal "training sessions", they did provide intensive background for college faculty working with minor students. Finally, on two campuses, interviewees noted that this issue was covered as part of their "flex day" training.

Staffing Issues: For classes taught on high school high school campuses (where most if not all of the students may be high school students), it appears that faculty are often selected based on seniority rather than recruited, but they have the option to decline to teach these classes. In a few instances, interviewees mentioned that college faculty was resistant to traveling to high schools to teach. All programs we contacted employed community college faculty, primarily adjuncts, to teach the classes on the high school campuses. One program had some high school faculty who qualified to teach at the college level and were working as adjunct instructors in the high-school based college instruction.

In regards to instruction provided on college campuses, instructors are generally not notified of the presence of minors in their classrooms. One campus reported that it allowed college faculty to decline students in grades below 11th grade, but did not specify whether minors were specially notated on the course roster or not. At another campus, a faculty member noted that he was asked if he would teach a class composed primarily of high school students and was happy to do so, but that it was not easy to find other instructors willing to work with this population.

The College Connection model presents a unique challenge. In the College Connection program, 100% of participant instruction occurs at the community college campus, including the high school component. As such, when each cohort completes their daily ADA requirements, they do so under the supervision and guidance of a high school teacher on the community college campus. This teacher must have a specialized credential which covers all of the required subjects for high school seniors, *and* must develop a separate arrangement through their union. All of the College Connection teachers that we interviewed worked under separate contracts arranged with the school district by their union representative. Along with this somewhat administrative challenge are the challenges faced by the College Connection teachers themselves—often, they work alone in a single classroom at the community college campus, separated from their colleagues and fellow high school faculty members. This particular assignment leaves them socially and physically isolated from their colleagues at the high school. While all of the faculty we spoke to in these programs were unusually enthusiastic about their jobs, some noted initial trepidation about leaving the high school campus.

Minors and the College Environment

Visibility of Minors: While community college faculty providing college instruction on the high school campus can assume that a large proportion of students in these classes are high-school students, many CE programs provide instruction on the college campus in classes where the majority of students are regular admits. Most colleges did not seem to provide faculty any notification that they had minor students in their classrooms. Administrators expressed concern that such knowledge might bias instructors against students, and acknowledged that some faculty had prejudices against minor students on campus. One program that did notify faculty did so part-way through the semester, encouraging CE students to build a relationship with the instructor before revealing that they were, in fact, a high school student. One program that chose to notify instructors of the student's special admit status did so in order to "trouble-shoot" any problems with student attendance or performance in the classroom.

Student Maturity Level and Preparedness: Interviewees noted that in many cases, their students were high performing, well-prepared college students, often as a result of program participation. CE students are expected to adhere to the same rules and code of conduct as regular admits. However, college expectations are generally higher than those of high school. Students who take longer to adjust to the pace of a normal college course load can easily find themselves overwhelmed. Students who are new to college have not only higher expectations to navigate, but must also successfully manage their own schedules and new administrative procedures. There is much less "handholding" than what high school students are accustomed to, which may cause them considerable difficulty. For instance, administrative procedures for adding and dropping courses before deadline may be a completely foreign concept to many high

school students, many of whom are used to having their courses selected for them by their high school counselor.

Some students may not understand the ramifications of taking a course, the results of which stay on their permanent college transcripts—and that these transcripts will follow them, potentially for the rest of their academic careers. One administrator spoke of needing to explain to a new college student that he was ineligible for financial aid due to an “F” he had received in a class he had to taken for dual credit. The student was greatly demoralized by this, having not realized the severity of the consequences. The administrator thought that the student may not have taken the course seriously because it was located on a high school campus.

Environment may play a larger factor than what is currently understood about the context in which students participate in CE. Certainly, courses occurring on the college campus are easier to comprehend as college courses, whereas college courses occurring on the high school campus, and their associated expectations, may be more difficult for high school students to differentiate. While high-school campus courses are very accessible, some research suggests that students take them less seriously and learn less about college expectations as a result³¹.

Finally, some interviewees noted concerns about the specific age level and selection processes for special admits, noting that some students, particularly 9th grade or below, might not be mature enough to handle the campus environment. Some interviewees noted concern about programs targeting “at-risk” youth bringing problem students onto the campus.

One community college faculty member teaching both general admit CE students and CE students in a more targeted program had particularly noteworthy observations about high school students’ expectations and behavior. The general admit CE students tended to be well-prepared, well-behaved students that often out-performed even regular admits because “they know

education is important.” The students in the program targeting more at-risk students did not have the same expectations or understandings of college-going because no one in their family had ever gone to college, and they themselves had not previously considered it. He noted, “They still call each other names and horseplay. Here in the college environment, you just suspend them. That is a shock for them.”

He went on to observe, “The college wasn’t expecting high school students; I was.” He noted one both had impart to students high expectations, but also provide guidance and support to make the transition from high school to college. While this process might be challenging, the payoff was substantial because all of their lives, these students have been told “You aren’t going to see college; you are going to work after school.” The impact of being in a college-level program on these students’ self-esteem, aspirations and maturity-level is reportedly immense.

Safety: While interaction with regular students is generally seen one of the benefits of CE programs, introducing special admits to the campus community can also serve as a challenge because high school students are minors in an adult environment. Community college is not only an academic institution, but also an environment which can be highly social and fraternization between students is common. More than one campus administrator expressed concern about underage female students’ discomfort at unwelcome advances from older students who may or may not have recognized them as minors.

Interviewees also noted transportation concerns, especially for low-income students who did not have access to automobiles. In one instance, an administrator observed that students might not feel safe traveling to the community college by transit due to concerns about gang activity.

Parental Involvement: While parental involvement can be key in inspiring student educational aspirations, and parents undoubtedly should be primary targets for outreach about the benefits of dual enrollment programs, parents are the most cited source of challenges involving minors in college programs. Administrators noted that some of the parents of special admits are over-involved in their child's education. Parents often do not understand that FERPA guidelines protect the academic privacy of their child at the college level. Not being able to access their child's transcripts or speak to instructors about their child's performance is often a new, challenging experience that frustrates some parents. Highly involved parents often act as the advocates of their children, especially when their child cannot register in the classes they want because special admits have lower registration priority. Parents may respond by taking their case to the administration and demanding meetings to discuss these concerns.

However, in some cases, lack of parental support may be a problem. In one CE program targeting at-risk youth, an instructor chose to have considerable contact with the parents of his first-generation college students because if he had not, he feared he would lose most of them. He noted, "They have no clue what education is above and beyond high school... You have to remind parents that if their son or daughter is 15-16 years old, you have to let them get their education instead of sending them to work." By the time the students had completed part of the program parents were reportedly appreciating the importance of this experience for their students' future.

State law requires that special admits receive parental consent to participate in any college-level courses. Some of the schools that we spoke with take this one step further, and include special guidelines for parents that explain FERPA, and the ways in which parents can/cannot be involved in their child's CE academic experiences, and many require or suggest orientation

meetings for the parents of students wishing to be involved in dual enrollment. Finally, instructors and administrators noted that if one of the primary goals of CE is to transition participants from dependent high school students to independent college students, parents need to learn to encourage their students to advocate for themselves so they can learn the college system.

However, high school students, particularly those who are becoming first generation college students, may need additional services to make the transition. As one instructor noted, some people say that once the high school students are taking a college class, they are college students. He disagrees: “They are high school students that we mentor into college students.”

Funding

CE exists, in its most basic form, by way funds generated by FTES and ADAs. This means that existing financial support covers only the costs of students attending classes. Any other funds used to support CE efforts come from grant money. This tends to impact the kind of services programs can offer students.

When asked about specific challenges involving funding, the vast majority of administrators mentioned textbooks as one of their biggest concerns. Special admits may receive tuition-free credits, but this does not cover the costs of their textbooks, which can be substantial and serve as a barrier to access. Some colleges used part of their SB70 funding to help subsidize the costs of textbooks for students. In two programs, partner high schools provided stipends for their students to purchase textbooks. Some programs were using lending libraries to recycle these precious resources to students.

Another issue is transportation. One program was using grant funding to provide special admits with bus passes to get to on-campus programming, while another college provided its own transportation system to students.

Many of the administrators involved in implementing these programs noted being “stretched thin”. Most were not hired under any special funding and many had multiple responsibilities at their respective institutions. The majority of funding for CE, as mentioned previously, comes directly from ADA/FTES funding which does not generate any supplemental funding for the administrative costs necessary to implement a comprehensive program.

Various types of grant funding are available, particularly for implementing CTE-focused programs and early/middle college high schools, as noted in the sections on these models of provision. While most interviewees did not feel they had the time to write proposals, those who did were able to realize substantial benefits. Cost-sharing with high schools appeared to be fairly minimal, with only one program reporting formal cost-sharing.

Documenting Outcomes

Similar to the challenges cited in the literature review, we found that many programs lacked specific data on outcomes or the characteristics of participating students. At a few programs, administrators, deeply involved in the dynamics of running their programs, were hard pressed to come up with any definition of success for their program, let alone measures that would indicate that their program was successful. As anticipated, lack of consistent definitions of success, and lack of standardized data across programs, made it difficult to define and select best practices.

College representatives were generally aware of how many special admits they had overall, but many did not have a breakdown by program, or of student characteristics within programs. Many felt that they lacked the resources to track student outcomes over time, including lack of funding, expertise, time, and access to longitudinal data. The ability to track student outcomes is related to additional program funding in that documentation of student success facilitates proposals for additional funding, and funders often require program evaluations.

California has access to several main data sources that would allow for some analysis of student outcomes. These include the National Student Clearinghouse (NSC)³², which allows for the tracking of students across institutions; California Partnership for Student Success (Cal-PASS)³³, a statewide initiative that collects intersegmental data on student success in grades K-16, and California Longitudinal Pupil Achievement Data System (Cal-PADS)³⁴, which includes statewide assessment data, enrollment data, teacher assignment data, and other elements. However, Cal-PASS does not currently include complete coverage of all educational institutions, Cal-PADS is just launching in 2009-2010, and NCS requires a subscription for use.

There are also some major initiatives underway collecting data and research on various funded CE initiatives that should inform policy-makers of the relative success of various programs.

The National Center for Restructuring Education, Schools and Teaching (NCrest)³⁵ is conducting research on *Early/Middle College High Schools* and has performed analyses of students' college transcripts and a survey of student beliefs, attitudes, and activities amongst other evaluative activities. Some of that data is presented in the Santa Ana Case Study in this report.

The Community College Research Center (CCRC) is working with The James Irvine Foundation to manage and evaluate the *Concurrent Courses: Pathways to College and Careers Initiative* for the eight selected California partnerships mentioned in the section of this report on CTE programs³⁶. The CCRC evaluation will include qualitative implementation analysis and a quantitative outcomes analysis using Cal-PASS data. However, these analyses will not be available until approximately 2010.

Two of the programs highlighted in the case studies tracked data on student participants. One, the relatively small Butte College Connection, was able to track student characteristics and student outcomes such as GPA and credits earned within the program. Program faculty often remain in contact with students and are able to report at least anecdotally on student progress after they leave the College Connection program. The Butte College Connection has not yet sought outside funding with these data.

Santa Ana College has made extensive use of student outcomes data. This particular college works closely with their campus' Office of Institutional Research to develop and implement evaluation measurements, track student GPA, transfer rate, and student persistence in their post-secondary academic efforts. The success of this effort is largely dependent on partnerships with other institutions that allow the community college access to shared data, and technical assistance from grantors. The success of concurrently enrolled students is seen as only part of a larger collaborative effort to enhance student success all the way along the pipeline. Because the college has received funding from the James Irvine Foundation via the ARCHES collaborative for its CTE-based program (Career Academy Scholars), and from the Middle College National Consortium and the State of California for its Middle College High School

program, the college has developed and tracked specific goals and objectives in order to conduct standardized data collection and facilitate evaluation.

CONCLUSION

The worldwide recession has had a dramatic impact on state education budgets. Some states are looking at reducing funding and/or the scope of their CE programs, including Utah, Arkansas, and Minnesota.³⁷ However, Colorado's governor has made a commitment to ongoing support of CE programs to cut dropout rates and increase the number of college graduates to aid in economic recovery.^{38, 39} Likewise, pointing to a projected shortage of 1 million college graduates by 2025, authors of a new report from the Public Policy Institute (2009) suggest increasing support for all programs enhancing college readiness and increasing the number of baccalaureate degrees granted in the state.

California's economy and state budget have been particularly hard-hit by the recession. The State of California raised tuition and imposed enrollment caps at both the CSUs and UCs, and many anticipate an enrollment shift from the CSU and UC systems to community colleges, which cannot directly restrict enrollment. Whether as result of this situation or other demographic trends, enrollment in the community colleges increased by 4.9% between the 2007/2008 and 2008/2009 school years—a number well above the 2% growth funding provided by the state budget.⁴⁰ At the same time, as a result of budget cuts, community colleges have had to decrease their course offerings by as much as 20%. Consequently there are more students enrolling at community colleges with fewer course offerings. Currently, K-12 special admits in CE programs are lowest priority in terms of registration and can no longer depend on being able to enroll in the classes they desire.

RECOMMENDATIONS

Based on the research available, concurrent enrollment appears to provide benefits to students in that it may increase students' college-going knowledge and aspirations, enhance high school success, improve the likelihood of college enrollment and retention, and provide some time and cost savings to students and their families. In the long run, some programs may provide cost-savings to states if they enhance students' college-going behavior and result in consequent increased earning capacity and hence, increased tax revenues and possible decreased costs for social services. However, the state is currently facing a severe budget crisis, which impedes its ability to provide much-needed funding to ongoing comprehensive and new concurrent enrollment programs. With these considerations in mind, the following recommendations are offered.

- Consider California's current demographics and future educational and workforce needs to determine how concurrent enrollment can fit into a comprehensive educational strategy to meet those needs. For instance, a new report by the California Public Policy Institute suggests that the state may have a shortage of 1 million college graduates by 2025. While concurrent enrollment legislation is currently focused on high achieving students, many of whom are already college-bound, it might also be re-focused on the goal of enhancing college readiness, particularly amongst populations with low college participation rates.
- Continue to encourage inter-segmental collaboration and alignment of requirements and programming to support the transition from high school to college, and transfer from community college to 4-year colleges.

- Support efforts to expand and standardize statewide inter-segmental data collection on students and student outcomes. Support objective research evaluating the outcomes of different models of concurrent enrollment and use this evidence to make decisions about the most effective models of concurrent enrollment to support. Invest in training and support for administrators and institutional researchers to use these data for program evaluation.
- Consider refashioning the priority language in 76001(e). More comprehensive concurrent enrollment programs such as various sequenced CTE pathways, college connection and early/middle college high schools require considerable investment in money, effort and time. CE students' low enrollment priority in a time of budget crisis can jeopardize these programs because students must enroll in college classes to participate, but may not be able to get into these classes in time to benefit from the program.
- Exempt students in more comprehensive programs from the 11 unit cap (76001(d)) to facilitate faster progress to the baccalaureate degree.
- Provide waivers to the 5% cap on summer classes (except physical education) (48000(d)(2) for additional circumstances. While there are already important waivers in place that have assisted MCHS/ECHS programs, further loosening this restriction may benefit students in rural areas in particular, where school districts may have too few students to offer summer school classes and other important programming.
- Explore the utility of hybrid programs such as College Connection, which follows a model similar to that of the ECHS/MCHS, but at a more limited scale and cost. What are the comparative advantages and disadvantages of these programs?

- Consider ways to facilitate dual crediting of courses for both high school and college credit so that CE students can earn college credit in a compressed timeframe if they have chosen to enroll in college-campus-based comprehensive programs (76001(c)).
- Consider how to refine programs that offer instruction on high school campuses to classes made up primarily of high school students. Because of the many issues cited by administrators concerning student maturity levels and understanding of college requirements, and research suggesting that students take college courses offered at high schools less seriously, it is worth looking into ways to encourage/allow additional counseling and advisement as part of these programs that attempt to broaden the scope of CE provision by increasing access.
- Consider requiring that families and/or students pay tuition for courses that CE students do not complete or fail. While free tuition is a considerable boon to students, many people do not take seriously courses they receive for “free”, and many students purportedly do not understand the ramifications of an “F” on their college transcript.
- Consider setting a minimum age or grade level for minor students on the college campus.
- Investigate the pros and cons of funding allocation as experienced by other states. Determine whether and how different forms of dividing funding responsibility between high schools and colleges incentivize or disincentivize districts to offer CE opportunities.

CASE STUDIES



PIERCE COLLEGE

Overview

Pierce College has one of the largest CE programs in Southern California. Rocky Young, currently the Chancellor of the Los Angeles Community College District, helped to develop this off-campus program while working at Santa Monica College in the 1980s. He brought the idea for the program to Pierce after he became college president in 1999. For some time, Pierce and Santa Monica colleges offered classes after school on some of the same high school campuses in the West Valley.⁴¹ Initially, the program was run by Academic Outreach Director, Sam Mayo, formerly of Los Angeles Valley College. His position was taken over by Denny Thompson, a retired high school principal, in 2006.

The program grew a great deal around 2003-2004 to address the statewide drop in community college enrollments by encouraging high school students to enroll and continue at Pierce College. Pierce College administrators outlined their objectives in the 2003 Pierce College “Student Success Plan” in 2003. Administrators, faculty, and the community realized that increasing CE opportunities for K-12 students would satisfy multiple goals of the “Student Success Plan”—the objectives of which are highly representative of Pierce’s overall philosophy on CE:

“Student success is the true measure of a college’s success. If colleges were funded on student success measures, institutions would focus on goal completion much more than on enrollment. Administrators would scrutinize goal completion rates instead of enrollment data, and would be held accountable for improving those rates. Faculty and staff would be evaluated on their contribution toward student achievement. Marketing directors would target students likely to succeed

or students who fit in specially designed retention programs; recruitment and retention would go hand in hand. New students would be carefully monitored and interventions would be designed to assist them. Each student would be viewed as an important investment.”¹⁴

The majority of Pierce’s K-12 special-admits are enrolled through the Academic Outreach Program through three main enrollment options: 1) self-initiated enrollment in Pierce courses seeking dual credit approval on a case-by-case basis, 2) enrollment in Pierce courses offered on several high school campuses, and/or 3) participation in the Tech Prep Program, which offers classes with a career/technical focus, such as the “Digital Academy” and the “Automotive Academy.”

Pierce partners with the Los Angeles Unified School District (specifically “District One” of the LAUSD), and with the smaller Las Virgenes Unified School District, across all of which they offer classes on fourteen different campuses. Because many of these students do not have their own transportation and would have substantial difficulties physically getting themselves to the Pierce campus—and making course offerings easily accessible increases the likelihood that interested students will participate. As one administrator put it, “[We] take Pierce College to the kids instead of making the kids come to Pierce College.”

Student Population

Community and Geography: The majority of special admits are located in the Los Angeles Unified School District’s (LAUSD) District One, which is located north-west of central Los Angeles in the district of San Fernando Valley. These communities include Northridge,

¹⁴ From Pierce College 2003 “Student Success Plan”

Reseda, Chatsworth, and Canoga Park. Reseda, in 2009, reported an average household size of 3.05 persons¹⁵ with a total income of \$54,771¹⁶.

Pierce College also has CE partnerships with schools located in the Las Virgenes Unified School District, which is a high-income area approximately 10 miles west along the Ventura Freeway and includes the communities of Agoura, Agoura Hills, and Calabasas. According to a 2007 estimate, the median income for a household in Calabasas was \$104,935¹⁷, and the median income for a family was \$122,482 with an average family size of 3.14.

Demographics: According to data obtained from the California Community Colleges Research and Planning Group, Pierce College had approximately 3,270 K-12 special-admits and a total of 23,317 students during the 2009 academic year. CE students account for approximately 14% of all Pierce students. 55% of all Pierce students are female and 45% are male. The ethnicities of students in District One of the LAUSD, Pierce students overall, and students participating in CE programs through Pierce College are reported as follows:

Table 3. Demographic Comparisons, Pierce College

RACE/ETHNICITY	LA USD	Pierce College	CE Programs
ASIAN	3.7	9.9	11.3
AFRICAN-AMERICAN	10.7	5.9	5.7
FILIPINO	2.2	4.0	3.2
HISPANIC	72.2	27.3	24.1
NATIVE AMERICAN	0.3	0.4	0.3
PACIFIC ISLANDER	0.3	0.5	0.4
WHITE	8.8	33.0	31.9
UNKNOWN/OTHER	0.8	19.0	23.1
<i>Source</i>	<i>CBEDS</i>	<i>Data- Mart</i>	<i>RP Group</i>

¹⁵ "91335 zip code Reseda (2000 Census data)". Retrieved 2009-10-28.

¹⁶ "Reseda" entry on the *Los Angeles Times* "Mapping L.A." website

¹⁷ "Calabasas City, California - Fact Sheet - American FactFinder". Factfinder.census.gov. Retrieved 2009-10-28.

Hispanic students are underrepresented in Pierce College CE programs compared to their overall representation in the campus community, and especially when compared to their representation in the local public schools, where 60% of the students are Hispanic. Asians and Whites, on the other hand, are represented in greater proportions on the Pierce campus and in the CE programs when compared to their overall representation in local public schools.

Target Population: There are no specific populations being targeted for CE participation. Instead, Pierce administrators emphasized that, “We want to reach out to every kid...make college courses available to every kid,” and noted that in the end, it is immaterial whether or not these students ultimately enroll at Pierce or at another college because the overall goal of their CE programs is to get more students enrolled in college. As such, Pierce does not impose any minimum grade point average or other academic pre-requisites for participation in CE opportunities. They reach out to not only the “A” students, but also to the “C” and “B” students, and others who may not have previously considered going to college. This outreach strategy is intended to enroll average students as well as high-achievers.

Pierce College has CE partnerships with fourteen different high school campuses. Although conversations did occur about the possibility of opening-up more courses on middle school campuses, these efforts were tabled due to budgetary constrictions.

Recruitment and Outreach: Pierce conducts extensive recruitment and outreach activities. Outreach occurs on a nearly weekly basis on-site at high schools in classrooms, general assemblies, at parent nights, during a large annual Pierce open-house, and in the media. Outreach efforts are reportedly conducted with a great deal of cultural sensitivity, often in multiple languages utilizing cultural experts or members of communities targeted for outreach. For example, one administrator spoke about conducting outreach presentations in Farsi for

members of the Persian community, taking into account cultural issues concerning women and the college experience. Outreach staff is also called upon to address specific concerns of the parents of Latino students, including common misunderstandings about the requirements of AB54018 and opportunities for financial aid. Pierce's ability to conduct much of its outreach efforts in multiple languages reportedly ensures that a very large cross-section of students (and their families) are made aware of these unique educational opportunities.

Although Pierce has its own outreach department with a coordinator and small staff, outreach efforts are also supported by multiple arms of the college's administration. Because Pierce attempts to fulfill all requests for outreach presentations at the local high schools, regardless of whether or not a partnership agreement already exists between institutions, its outreach staff tends to be busy. If this outreach staff is not available, the Dean of Academic Affairs calls on support from staff of the most appropriate administrative department at Pierce relevant to the requested outreach presentation. For example, if a high school requests a presentation on college applications and admissions and the outreach staff is already booked, staff from the Pierce College Office of Admissions will make the presentation. This comprehensive, collective approach is meant to ensure that all requests on behalf of high school students are met and that the greatest numbers of students possible are given information on how to further their educational careers.

Application Procedures: Pierce College does not enforce a minimum GPA for students who wish to participate in CE courses, however, all students must meet the same prerequisites as fully matriculated Pierces students. High school students who wish to enroll in math or English

¹⁸ California Assembly Bill 540, also called "The Dream Act," was passed in 2002 and establishes guidelines for students of undocumented families who wish to enroll in California colleges and their eligibility to receive financial aid.

courses are subject to the same placement tests and/or required courses as all Pierce students. Administrators emphasized that the course expectations and requirements—including prerequisites and course placement—are the same for all Pierce students, and no special accommodations are made due to the age or class standing of the student. In fact, because priority of registration is determined by the number of units a student has accumulated (i.e., students who have obtained more units have higher priority for enrollment in courses), a few of the classes offered by Pierce that are held on high school campuses have more adult students enrollment versus K-12. This occurs most frequently with American Sign Language courses.

Students under the age of fourteen have to meet with a committee and are required to submit additional paperwork, all of which is specified by the California Educational Code (Ed-Code). Pierce has had students as young as eight or nine years old petition for CE courses. According to the Dean of Student Services of Pierce College, he, the child, the child's family, and the relevant faculty member must have a special meeting. During this, the Pierce team will counsel them with somewhat of a "reality check" about college, reminding the child and the child's family that college instructors will not modify the course on their behalf. Like all other students who participate in CE, these young students are expected to do the same work and are held to the same requirements and expectations. If the child and the child's family accept and understand both the restrictions and expectations, and depending on the student's maturity, any transcripts, and test scores, Pierce will make the collective decision if the young student will be admitted or not.

Program Components and Implementation

Staffing and Coordination: CE courses that are held on high school campuses are staffed by adjunct Pierce faculty selected by their Department Chair. As one administrator noted, “It is probably not self-chosen”, but most do “pretty well” and have developed expertise in teaching courses with large numbers of high school students. High school faculty who meet the minimum qualifications to teach in the community colleges may also become Pierce adjunct faculty and teach these courses.

Articulation is established through communication between Pierce’s Academic Outreach Coordinator (who is also a retired LAUSD principal) and each partnering high school. Representatives of partner institutions meet every semester to establish which courses will be offered and the academic requirements of each course in order to ensure that a college level standard is maintained. Every high school that partners with Pierce must designate one of its own faculty or staff to act as an official point-of-contact for the Outreach Coordinator and outreach staff. Most often, this is a high school counselor or the school’s principal.

Tech Prep courses are also articulated in a similar manner, with articulation requirements established on a class-by-class basis between the Outreach Coordinator, the Dean of Career and Technical Education, the Career Technical Education Articulation Officer, the designated high school contact person, and faculty involved with instruction of the course. For example, when people are brought together (i.e. faculty from similar departments at the high school and community college level) they discuss how courses can be articulated and how faculty can discuss which courses can be articulated. Everything is shared, including course outlines, syllabi, suggested text books, materials, direction, content, etc.

Instruction and Services: K-12 students who participate in CE have access to all of the resources that fully matriculated Pierce students do, including campus health services, counseling, and the career center. They also have the additional support and guidance of the outreach staff. Students are not limited to classes offered at their high school campus either, and may enroll in CE classes at the institution of their choice. There are no accommodations provided in the way of transportation for CE students. They, like all other Pierce students, are responsible for getting to and from the classes in which they choose to enroll.

CE Policy: All students who participate in CE must submit a signed parental consent form. Individual students who enroll in courses at the Pierce College campus and wish to receive both high school and college credit must submit an approval form to the high school on a course-by-course basis. All students enrolled in Pierce classes, regardless of their setting, must adhere to the Pierce College student code of conduct.

CE students are protected under FERPA guidelines, just like all other matriculated Pierce students. There have been a few parental inquiries, but nothing of noteworthy concern. The most common issue reported, are related to parents that become frustrated when they cannot access to their students' grades for credits earned through Pierce. Clear guidelines and parental consent paperwork often clears-up much of these issues before they can occur.

Professional Development: There is no professional development for Pierce faculty specifically addressing the demands of teaching minors. However, many have instructors now have years of experience teaching on the high school campuses and administrators report that they are sensitive to the needs of minor students.

Program Funding & Policy Impact

Pierce College does not receive any specialized funding or grants to support its CE programs.

Costs for students: There are no fees charged to K-12 students, although they are responsible for their own textbooks. If an adult student wishes to take a class offered at a high school location, they have to pay tuition like any other Pierce student.

ADA/FTES: CE classes held on high school campuses are offered after normal hours of instruction, thus ensuring that students generate ADA funding for the high school before participating in their college classes. FTES are reimbursed to Pierce College for students who participate in Pierce classes, regardless of where instruction occurs—either on high school campuses or the Pierce campus itself.

Impact of Budget Crisis: The budget crisis and consequent funding cuts have resulted in reduced course offerings. During the winter session of 2008, Pierce was able to offer 200 sections on high school campuses; this year, it can afford to offer 50. Going forward, Pierce is reviewing past sessions and will be examining which courses are most necessary in order to ensure those that are immediate requirements (i.e., courses required for transferring to a four-year institution) are not lost.

The new enrollment caps being imposed by the California State and University of California systems, coupled with substantial fee hikes, have also had a substantial effect on California community colleges. There are now more students looking for fewer courses. As one administrator put it, “We have students willing to sit on the floor... The idea that you’re going to be able to get 6-12 units a semester [at community college] is no longer a guarantee.” Pierce administrators have also noticed a growth in enrollment numbers for their online courses—which

they interpret as further evidence that students are being forced to get more creative in achieving their academic goals, due to the sudden, severe limitations of academic resources.

Evidence of Success

Administrators noted that this program is largely based on making college courses accessible to high school students. One administrator noted that these courses inspire students to consider college and this provides an additional incentive for them to stay and finish high school. This sort of initiative is made possible by developing and maintaining good partnerships between the community college and local high schools. These partnerships are facilitated by trust and accountability, and the hire of a former high school principal to organize outreach activities has earned the program a certain degree of credibility because the Director of Academic Outreach understands high school administration and high school students. The investment in outreach to the local high schools and the community allows the program to communicate these opportunities to a wide audience.

One administrator cited anecdotal evidence that perhaps 80% of the students who enroll in the high-school based classes end up coming to Pierce College as regular admits. Administrators noted that the program has grown so large it is difficult to track students or keep consistent statistics on outcomes.

Contact Information & Websites

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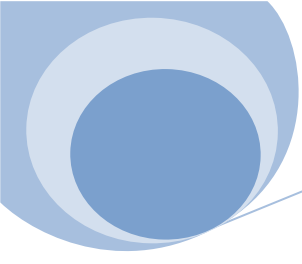
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COLLEGE CONNECTION PROGRAM: BUTTE COLLEGE

Overview

Butte College offers two main avenues for K-12 students to enroll in college courses: general, self-initiated CE and the College Connection program.

Aside from these CE programs, Butte also has a Tech Prep program which grants credit via 2+2 articulation rather than CE. The Butte College outreach office offers special programs to introduce middle and high school students from economically disadvantaged and underrepresented populations, including migrants, to college-going. These latter programs, Summer Link and LEAP Academy (Learn, Experience, Achieve, and Prevail) Academy, provide students with one unit of college credit for attending an intensive interdisciplinary session on the Butte College campus.

In general CE, the special admit student of whatever age is treated as a “normal student” who must register and enroll like any other college student. This option tends to attract high achievers. The College Connection program is a more structured program geared towards students who have potential but may no longer feel that the high school environment is right for them. As one interviewee noted, they get both over-achievers and “brilliant-but-lost” kids. College Connection targets high school seniors and offers them high-school instruction on the Butte Campus during their senior year as well as the opportunity to take Butte College courses.

The College Connection was started in 1990 by Mike Rocklein, a counselor at Paradise High School. This model has since been adopted by at least two other California community colleges, Shasta and Ohlone. The College Connection is different from a full Middle College High School model in that it focuses on high school seniors and does not institute a full 4-year

high school program on the campus. Some program faculty members feel that the scope and scale of the College Connection allows faculty to focus one-on-one attention on a specific group of students who really need this type of guidance.

At one point, Butte considered switching to the Gates Middle College Program, but decided against it because they already had success with their College Connection program and were concerned that adopting the Gates model would require that they drop College Connection and focus on developing a partnership with only one school district for a Middle College High School.

This case study will provide some information about Butte CE programs in general, but focus on the College Connection program in particular.

Student Population

Community and Geography: Butte County is located in northern California in the Central Valley on the western edge of the Sierra Nevada Mountains.

Butte's College Connection program works with students from Oroville Union High School, Chico Unified School District regions III and IV and Paradise Unified School District. The goal is to serve all the communities that are served by the Butte-Glenn Community College. Cities include Biggs, Chico, Gridley, Oroville and Paradise.

Butte County is a partly rural and agricultural area where transportation can be a challenge. Butte College does have the largest transportation system maintained by any college in California, and any enrolled student can utilize that. However, administrators noted that while they can easily represent the south part of the county, Orland is an hour away by car and can present an obstacle to serving students from this area.

Butte's population is relatively well educated with about 82% of the population of adults over the age of 25 having at least a high school diploma, and 23% having at least a bachelor's degree. About 18% of the population lives in rural areas.

Butte County is also home to three Rancherias representing the Tyme Maidu, Maidu and Mechoopda Maidu Indians.

Demographics: According to data from the Community Colleges Research and Planning Group, Butte had 1,065 special-admit students in 2008/2009. Overall, Butte's special admits were 54% female and 46% male in 2008/2009. The 2008/2009 ethnicity breakdown of special admits overall is as follows:

Table 4. Demographic Comparisons, Butte College

RACE/ETHNICITY	Butte Cnty K-12	Butte College	CE Programs
ASIAN	7.2	5.4	5.3
AFRICAN-AMERICAN	2.8	2.7	2.2
FILIPINO	0.4	0.6	1.2
HISPANIC	16.7	13.8	18.0
NATIVE AMERICAN	2.7	2.5	2.7
PACIFIC ISLANDER	0.4	0.5	0.6
WHITE	63.5	65.3	61.3
UNKNOWN/OTHER	6.2	9.2	8.7
<i>Source</i>	<i>CBEDS</i>	<i>Data- Mart</i>	<i>RP Group</i>

The College Connection program is much smaller and accounts for about 140 students per year.

Target Population: As one administrator noted, their students are those who are highly motivated and/or those who just do not want to be at high school anymore but have not yet graduated. College Connection strives to keep kids with the potential to get "lost" in the system by teaching them strategies to navigate in a college environment, and by helping them develop

their interests into something with an academic focus. This program is open to high school seniors only, but there is no GPA requirement to get in, just the ability to work independently. Administrators target a cross-section of GPAs, from high to low.

Recruitment and Outreach: Typically in the fall, Student Services representatives hold a fall breakfast for high school counselors at all of their partner high schools. CE is one of the topics they address with the counselors. They do send out packets to HS counselors informing them about deadlines and requirements for various programs. However, College Connection has a more active role because the morning home room instructors are from the high schools they represent.

College Connection staff target high school classes likely to have a lot of juniors enrolled and do 10-15 minute presentation about the program. The program also sends letters home to the parents to invite them to an informational parent night at one of the high schools in the Oroville area. Program staff have highlighted their program in the local newspaper and staffed booths at Butte College Family Day to talk to parents about College Connection. They have also had their students participate in volunteer activities that help the community and make the program more visible in the community.

Application Procedures: General CE students have no real pre-requisites, but must consult with their high school counselor and principal to select appropriate courses; complete a CE permission form with signatures from their counselor, principal and parent, and complete the Butte College Basic Skills Assessment. Students of all grade levels who gain the proper permissions can attend classes at Butte College.

The College Connection program requires that students go through an application process to apply during the spring of their junior year. While all students have the opportunity to be

involved, the process is much more stringent than that for students participating in general CE. Program administrators start recruiting for the program in the January. Students must fill out an application, write an essay, get 2 teacher recommendations, and a parent statement showing the parent's support and permission for their participation. The student also must take the Butte College Assessment Test for Math/English and have an interview with the adviser and one other person.

College Connection faculty can exercise independent judgment on which students are likely to benefit from such instruction. For instance, the two Chico instructors get about 100 applications a year from which they select 70 to divide between 2 classrooms. Students need to be able to work independently and demonstrate that they are likely to be able to handle this sort of program, regardless of their HS GPA.

Program Components and Implementation

Staffing and Coordination: While there was previously an Office of School and College Relations that oversaw CE and outreach programs, this office no longer formally exists. Programs formerly handled by this office are now divided amongst divisions, with Admissions and Records administering general CE, Outreach and Orientation administering special outreach programs, and Instructions administering College Connection. This is a fairly recent change.

The Butte College Connection employs 4 advisors who are all high school staff that work on the Butte Campus. They are each responsible for teaching home room and advising the participating students from their district or region. One of these 4 advisors has been designated the Coordinator/Liaison for the program. The coordinator is responsible for scheduling classrooms, outreach, and monitoring student progress and interfacing with Butte College.

Instruction and Services: The College Connection faculty meets with students during a 1-hour homeroom (facilities lab) session in the morning. Students receive instruction and advising on a number of different topics, aimed at helping them make the transition from high school to college. These topics include everything from improving study skills, vocabulary development and test-taking strategies to understanding general education requirements.

The students must also complete 180 minutes per day of Independent Study for high school credit, including economics, English and government. The students can participate in sports and student government at their high schools if they want to, but their instruction and advising is entirely based at Butte College.

College Connection faculty encourage them to use the Center for Academic Success tutoring center and other campus resources. The goal of the College Connection program is to get students seamlessly transitioned into a fully-matriculated college program and lifestyle, so learning to use actual college resources is a very important part of their mission.

Aside from their high school work, students can take up to 11 units of college courses. They can end their senior year with 22-28 transfer credits; technically they could be at almost the sophomore level when they actually enter college.

The coordinator does not initially notify college faculty that they have a College Connection student in their class. Students are discouraged from telling the instructor themselves until they have established a relationship with that instructor. The coordinator monitors student progress by sending out a letter around the 4th week of instruction identifying the student as a College Connection student to their instructors, asking the instructor to fill-out a progress report form. The students are required to take the progress report form to the instructor. Administrators note that this allows them to get an idea how the student is doing, whether they

are attending class and turning in their homework, and how they are progressing academically. This helps them take action if necessary before any problems result in the student failing the class. Staff report that they generally receive very positive feedback from instructors because the students have been well-prepared to succeed in college.

CE Policy: Butte has formed a CE policy group to look at practices that might need to be modified to better serve their students and still stay in line with the intent of the CE legislation. There has been some concern about the way high school students might displace regular admits with respect to services and that this could be a problem in providing equivalent services. The campus is currently evaluating the pre-requisites for admission and trying to determine what types of students they should target and retain given the current economic climate.

Professional Development: Butte does not provide any special professional development for college faculty around handling CE students. Butte administrators had concerns similar to those expressed by administrators at many other programs contacted for this research. They noted that faculty do not believe that they should have to tailor their courses to a particular audience, and there is some concern that acknowledging that minors might have special needs would violate the overall intent of CE legislation—that the college classes in which these students participate be open to the general public. They noted that any special instruction or counseling that the College Connection students might need was provided by the program staff during the time they were technically fulfilling the high school part of their curriculum.

Program Funding & Policy Impact

Butte College has not sought grant funding for this particular program and services for students are offered via existing staff from high schools and the college. The high schools offer

some funding for books for students, and the college pays the coordinator a stipend for coordinating the program.

Costs for Students: CE students are not required to pay tuition. The students are required to pay the \$16 per semester health center fee and telephone registration fees.

Services for Students: The main cost incurred by students is for text books. The school districts provide a one-time loan of \$75 to each student towards the cost of books. The program is in the process of developing a lending library, and they ask the students to return any books purchased with these funds so that it can be lent to another student.

Staffing: The high school faculty for this program are paid by their respective high schools. The coordinator is paid by her high school, with an additional stipend provided by Butte College for coordinating the program.

ADA/FTEs: The high school benefits by getting full ADA and the college gets FTEs for the students' enrollment in college classes.

Impact of Budget Crisis: The campus is currently evaluation the pre-requisites for admission and trying to determine what types of students they should target and retain given the current economic climate.

Evidence of Success

College Connection has a low attrition rate. Students are fairly closely monitored and given demerits if they skip class or miss assignments. If they receive more than 5 demerits, they are sent back to their regular high school. The following table summarizes within-program statistics for 1990/1991 through 2003/2004:

Table 5. Program Statistics, Averages, Butte College Connection

Retention	College Credits	Units completed/ attempted	Entrance HS GPA	Exit HS GPA	College GPA
97%	20.8	93%	3.09	3.55	3.04

One administrator who had been students for approximately 5 years reported that nearly all of the students who stay in the program go to college, and 90% of the group that started college has stayed in college. In one 2006/2007 cohort, all graduating students planned on to attending college in the coming fall

- 56% planned to attend Butte,
- 30% planned to attend a CSU,
- 11% planned to attend another community college,
- 1 (4%) planned to attend a UC.

Since 2004, six Butte College Connection students have received the Gates Millennium scholarship, including 3 in 2009.

In terms of defining and measuring success, one administrator noted that many of the important markers are largely subjective; students come in their first semester as rather immature high school students and leave the program young adults. The change can be seen in student attitudes and confidence level as they become more independent and capable of facing the challenge of college on their own.

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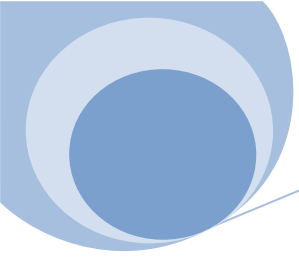
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COLLEGE CONNECTION PROGRAM: OHLONE COLLEGE

Overview

Ohlone College in Fremont offers three main pathways for K-12 students to earn dual credit: 1) general, self-initiated enrollment in community college courses that are also approved by their pre-college institution for dual credit, 2) enrollment in a handful of courses offered by Ohlone at the campuses of partnering high schools that have already been articulated by both institutions, and 3) participation in the College Connection program. Each of these pathways vary in structure and the degree to which they provide individualized support for each student. Any student may enroll in general coursework at the community college, but these students also tend to be “high achievers” who are primarily concerned with getting a jump-start on their college careers and improving their transcripts for college applications. The classes offered by Ohlone on high school campuses are generally focused in certain subject areas—in Fremont, for example, courses are concentrated in arts and theater—and are amazing opportunities for students interested in these subjects, but not necessarily all students. Fundamentally, College Connection is a program whose primary objective is to keep students interested in their education by broadening their educational options at a point in their high school careers where they’ve been identified as reaching a “stopping point.” Administrators often described these students as being otherwise “done” with high school—students who are not behind in their coursework or performing poorly, but not performing at their best because of apathy developed with regard to their high school experience. The College Connection program gives these less traditional “at-risk” students the opportunity to re-establish a passion for learning by radically changing their learning environment, placing them on a college campus, all day.

During the course of the day, these high school seniors will complete their daily high school requirements with their College Connection cohort in the mornings and attend college courses with fully matriculated Ohlone students in the afternoons and evenings. Participation in both high school “seat time” of 180 minutes per day and the enrollment in college courses allow both the partnering high school to earn ADA credit for daily attendance and FTES for Ohlone.

The College Connection Program at Ohlone College in Fremont has been adapted from a model in-place at Shasta College, but originally developed at Butte College. Dr. Doug Treadway, an administrator at Shasta before becoming President of Ohlone, brought the program model with him and implemented it at his new campus with the cooperation of the community college district board in 2005.

This case study will profile Ohlone College, but will focus on the College Connection program as a unique model of CE.

Student Population

Community and Geography: Ohlone College is located in Fremont California, which is a large suburban community on the edge of the Silicon Valley. The college is serviced by three local bus lines and is approximately 7 miles from Newark Memorial High School, and 5.5 miles from Kennedy High School in Fremont, both of which are part of the College Connection partnership.

While Ohlone College currently partners with high schools in the Fremont Unified and Newark Unified School districts, it may establish an additional partnership with James Logan Senior High School in Union City for an additional cohort of College Connection students at some point in the near future.

Demographics: According to data obtained from the California Community Colleges Research and Planning Group, Ohlone College had a total enrollment of 12,842 students in the 2008-2009 academic year. Approximately 26% (3,395) of these students were involved with CE programs in both the Newark and Fremont Unified School Districts. The ethnicity of the various student populations is diverse:

Table 6. Demographic Comparisons, Ohlone College

RACE/ETHNICITY	Newark USD	Fremont USD	Ohlone College	CE Programs
ASIAN	12.0	48.9	36.5	56.8
AFRICAN-AMERICAN	8.1	4.4	4.3	2.2
FILIPINO	9.4	5.7	7.1	2.2
HISPANIC	45.4	15.2	11.4	6.8
NATIVE AMERICAN	0.4	0.3	0.4	0.1
PACIFIC ISLANDER	2.5	0.8	1.4	1.0
WHITE	19.7	21.1	24.6	17.4
UNKNOWN/OTHER	2.4	3.6	14.3	11.5
<i>Source</i>	<i>CBEDS</i>	<i>CBEDS</i>	<i>Data-Mart</i>	<i>RP Group</i>

There is one high school in the Newark Unified School District (Newark Memorial High School) versus five in the Fremont Unified School District. There are College Connection cohorts of approximately equal size from one school in Fremont (Kennedy High School) and Newark Memorial High School, although there was no data available on the ethnicities of either of these cohorts.

Newark Unified and Fremont Unified vary greatly between their two largest ethnic groups—Hispanics and Asians. In Newark, Hispanics represent almost half of all students enrolled in the district, yet only 6.8% of Ohlone CE students are listed as being Hispanic.

Target population: The College Connection program does not target any particular demographic group. The program is intended to appeal to students who are otherwise “lost” in

the educational system. There are three types of students that the Ohlone College Connection tries to reach: 1) the high-achieving student looking for transferrable units, 2) the student who is bright but barely passing classes because s/he is bored and disengaged, and 3) the student who really wants to go to community college and wants the transition experience. In this sense College Connection is intended to provide scaffolding for them to transition into community college.

Recruitment and outreach: The Ohlone College Connection program has students participate in all of the important nonacademic aspects of their senior year, such as assemblies and spirit week. This provides exposure for the College Connection program and spread information by word of mouth. During the school year, College Connection students and instructors participate in open houses at partnering high school campuses so students can speak with others face-to-face about their College Connection experiences. They also visit specific classes, such as English classes, to deliver a presentation on College Connection. College Connection instructors and high school counselors also attend high school “parent nights,” and during these, conduct outreach specific to Hispanic parents’ associations.

In addition to the efforts of the College Connection students and instructors, high school staff also conducts outreach on the high school campuses. At one of the partnering high schools, the principal has assigned one his counseling staff to be the College Connection liaison and scout for potential students during their junior year.

Application Procedures: General, self-initiated CE students do not have any formal pre-requisites; however, they must consult with their high school counselor and principal to ensure that courses are appropriate and will be granted high school, as well as college, credit. Each

student must obtain permission with signatures from their counselor, principal and parent, regardless of her/his mode of participation in CE,

College Connection program applicants must also complete a supplemental application during their junior year of high school. This application consists of the following: 1) a personal statement addressing why they want to participate and why they would be successful, 2) a personal statement from their parent/guardian in-support of the student's intent, and 3) a recommendation from a high school teacher.

Each year, the College Connection program supports two cohorts, each with approximately 33-35 students from Newark Memorial High School and Kennedy High School. The application process is fairly competitive for the limited number of spaces, but acceptance is very much on an individual level for each student and does not overemphasize GPA or test scores.

Program Components and Implementation

Staffing and Coordination: The Ohlone College Connection program utilizes two full-time instructors who each teach their cohort's high school requirements before releasing the students to take the community college classes of their choice. These instructors are employees of their respective school districts, in this case, Newark Memorial in the Newark Unified School District and Kennedy High School in the Fremont Unified School District. The cohorts are separate from one another because of different requirements of each of the participating high school districts. Each instructor has a union contract that has been negotiated through a union representative to accommodate for some of the differences they experience while teaching at a separate campus. The College Connection instructors are the people who are primarily

responsible for the efforts of their students and provide both a mentoring and instructional role in each student's education. When they need assistance from Ohlone, they are supported by the Office of the Vice President of Academic Affairs or the Dean of Counseling.

Instruction and Services: The College Connection instructor meets with students from 8:15 to 12:30, during which they are taught their high school graduation requirement classes, saving the afternoons are for college courses. All instruction occurs entirely at the college and students can select any college course that they qualify for and wish to take. The College Connection student population is highly diverse, academically and culturally, ranging from one special-education student to advanced-placement students. The teaching staff tries to steer them towards transferrable units, which not necessarily all students do. The special education student, for example, is taking supplemental skills courses for English (computer skills, etc). Students are primarily mentored by the high school instructor for their cohort, however, they are also encouraged to learn to utilize all available resources at the Ohlone campus. This is considered a key part of their acculturation to the campus environment, fulfilling one of the main objectives of this program, providing a seamless transition between pre-college and collegiate life.

Aside from their high school work, students can take up to 11 units of college courses. They can end their senior year with 22-28 transfer credits; technically they could be at almost the sophomore level when they actually enter college.

Professional Development: Ohlone does not provide any specialized professional development for either the high school instructors who teach College Connection students, or the regular Ohlone faculty who may or may not have College Connection students enrolled in their courses. The high school instructors are employees of their respective unified school districts and are not employees of Ohlone College. Ohlone faculty who teach courses in which these

minor students may be enrolled do not modify their curriculum or content in any way that might accommodate a special admit student. Special admit students are expected to understand and cope with being in a college level course without special accommodations and the instructors are expected to treat them like regular college students. However, Ohlone has allowed the high school instructors to participate in faculty workshops that are offered to Ohlone faculty.

Program Funding & Policy Impact

Ohlone College does not receive any specialized funding or grants to support any of their CE activities.

Costs for students: There is no cost for students who wish to participate in CE programs at Ohlone College. The only cost College Connection students have to pay is the cost for their semester's parking permit, if they drive a car. The school district pays for the cost of high school required text books, as well as the college level texts—although students are expected to keep their books in good shape and return them at the end of the semester for future students to use. In 2009, at the time of this report, funding for the cost of textbooks had been further reduced and the program was conducting fundraising to help off-set some of these costs.

ADA/FTES: In the College Connection program, both the high schools and the community college benefit from student participation. Because the students are fulfilling their required high school obligations, the high school is reimbursed for their daily attendance (ADA) and Ohlone receives FTES for courses students enroll in at the campus.

Budget cutbacks and other challenges: Because dual enrollment is a choice rather than a mandate, it is subject to lower priority status when state funding is reduced due to economic downturns. In the current budget crises, Ohlone has downsized dual enrollment rather

significantly on a number of fronts. First, in the spring of 2009 the Board of Trustees voted to discontinue dual enrollment of students in grades K-9, except in very rare instances in a very limited set of courses. Although the parent community was upset, the Board felt this prioritization was in the best interest of the District. Further, the foreign language partnership with Irvington and Mission High Schools, involving 35 course sections, has been eliminated. Finally, Ohlone has had to scale back its American Sign Language courses from 16 to eight.

In the fall of 2008 Ohlone had 76 "partnership" dual enrollment classes at the high schools with 1,862 enrollments generating 600 FTES. (Many of the "fall" classes are annual but are treated as fall classes, leading to the fall numbers being higher.) In the spring of 2009 Ohlone had 21 classes with an enrollment of 530 generating 83 FTES. Due to budget issues, the fall of 2009 offering of classes to receive apportionment dropped to 36 with projected enrollments of 800 generating a projected 250 FTES (a 53% reduction). The spring of 2010 classes will be reduced to 19 with projected enrollment of 480 and FTES of 75 (a 10% reduction).

Evidence of Success

Like many other administrators implementing CE programs, Ohlone College Connection administrators emphasized the importance of successful high school-community college partnerships. As one noted, "Communication, integration of the faculty at both levels--that they think together, that they plan together, is a requirement. Our Deans are involved in much of it. They have excellent relationships with the principals and they work together closely. I try to emphasize the word PARTNERSHIP. This is vital."

Likewise, College Connection high school instructors are enthusiastic about their program. The Ohlone Vice President of Academic Affairs attended the initial conversations between

Shasta faculty and Newark Unified School district administrators about implementing a similar program at Ohlone and commented, "...I've never had an interaction with a group of high school teachers who were more excited about what they were doing!"

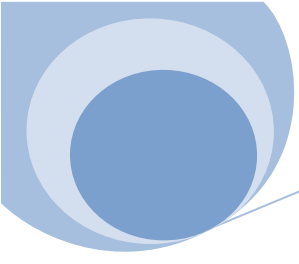
Ohlone does not track any traditional student outcome data, however, they do offer anecdotal evidence of their students' success. Approximately ½ go on to a four year university and the other ½ enroll in Ohlone. During the four years that the Newark College Connection instructor has been teaching students in the program, only five students out of 120 have not moved immediately into their formal college education after participating in College Connection. According to the Principal of Kennedy High School in Fremont, 100% of Kennedy College Connection participants have graduated from high school, however, they have not yet started tracking college entrance data.

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SANTA ANA COLLEGE

Overview

Santa Ana College (SAC) offers three main avenues for K-12 students to enroll in college courses:

- **The Career Advanced Placement Program (CAPP):** This is general, self-initiated CE of high school students who take classes on the Santa Ana campus;
- **Middle College High School:** This program is a collaborative venture between the Santa Ana Unified School District (SAUSD) and Santa Ana College (SAC). It is a small high school located on the Santa Ana College Campus. The program started in 1997 with 80 students, and now has approximately 300 students enrolled.
- **Career Academy Scholars Program:** This new program is a CTE multiple pathways program sponsored by the Alliance for Regional Collaboration to Heighten Educational Success (ARCHES) and funded by a grant from the James Irvine Foundation. Santa Ana's program is focusing on four major areas: 1) digital media arts, 2) international business, 3) auto detail hybrid program, and 4) welding. They expect to have 125 students enrolled by winter of 2009/2010.

"Since 1983, the Santa Ana region and executive leaders at every level of the pipeline have been working together to declare war on the underdevelopment of students from the greater Santa Ana area."

These CE programs must be placed in the larger context of the work Santa Ana College does across the entire pipeline within the framework of the Santa Ana Partnership. The Santa Ana Partnership is one of the oldest collaboratives in California. The partnership started

in 1983 as a collaboration between California State University, Fullerton, Santa Ana College,

Santa Ana Unified School District, and University of California, Irvine. The goal of the collaborative is “to provide all Santa Ana students with an academically rigorous curriculum and the support that they need to succeed in school, advance to college, and graduate.”¹⁹

In 1991, the partnership joined the Ford Foundation's Urban Partnership Program. This nationwide Ford Foundation educational initiative gathered together business and civic leaders, educators, community-based organizations, students, and parents to cooperate in developing and funding locally based educational programs.²⁰

Overall, every high school student in the district is required to complete college and/or university applications as part of the Partnership's work to encourage high school graduation and college-going in Santa Ana.

Student Population

Community and Geography: The community of Santa Ana is located in Orange County south of Los Angeles about 10 miles from the Pacific coast.

According to the 2000 US Census, Santa Ana has a population of 337,977. Amongst cities with populations of 200,000 or more, Santa Ana City is the fifth most densely populated and has high housing density, averaging 4.55 persons per household.

The majority(68%) of the residents over the age of 5 speak Spanish and 29% of residents over 5 years of age speak English “not well” or “not at all”; 62% of households are primarily Spanish-speaking and 23% of households are “linguistically isolated” (no one over the age of 14 can speak English well).

¹⁹ <http://www.ced.csulb.edu/california-alliance/index.html>

²⁰ Lundquist, S. (1995). The Urban Partnership Program: A New Model for Strengthening Communities through Educational Change. *Community College Journal*, v65 n7 p28-32 Aug-Sep 1995

Santa Ana is a fairly young city, with 46% of its population age 19 or younger. Fifty-eight percent (58%) of adults 25 and younger have less than a high school education.

Student Demographics: According to data from the Community Colleges Research and Planning Group, Santa Ana College had 1,202 special-admit (CE) students in 2008/2009. Overall, Santa Ana’s special admits were 45% female and 55% male in 2008/2009. The 2008/2009 ethnicity breakdown of special admits, SAC students and Santa Ana Unified School district students overall is as follows.

Table 7. Demographic Comparisons, Santa Ana College

RACE/ETHNICITY	SAUSD	Santa Ana College	CE Programs
ASIAN	2.7	10.9	10.6
AFRICAN-AMERICAN	0.6	2.6	1.2
FILIPINO	0.2	1.3	0.6
HISPANIC	92.4	40.2	61.9
NATIVE AMERICAN	0.1	0.6	0.6
PACIFIC ISLANDER	0.2	0.5	0.5
WHITE	3.1	34.2	18.6
UNKNOWN/OTHER	0.7	9.8	6.2
	<i>CBEDS</i>	<i>Data-Mart</i>	<i>RP Group</i>

While the proportion of participating Hispanic students in CE seems phenomenal when compared with many other colleges, administrators noted that about half of these students participate in education reform initiatives that use CE as a core strategy (MCHS, the CASP, TRIO programs at SAC, and more) but that just as many students enroll in a community college course on their own. These “self-initiated students” do not receive the supplemental support associated with formally organized CE programs. Overall, these students are somewhat whiter and somewhat less Latino than the population of students in local feeder schools.

Target Population: The programs highlighted in this case study target somewhat different student groups, although all serve predominantly students from the Santa Ana Unified School District. SAC complements the self-initiated CAP Program with more strategic forms of CE programs to address specific populations with less access to resources and/or more barriers to accessing higher education.

- **The Career Advanced Placement Program (CAPP):** As noted in the program title, this is an advanced placement program. Administrators note that it tends to attract somewhat more privileged students who can determine how to enroll in college classes on their own and find funding for books and transportation to campus. This program has an estimated 900 students per year.
- **Middle College High School:** This program recruits 8th graders and provides instruction for grades 9-12. The program targets students from underserved or underrepresented populations, students who would be first-generation college-goers, those with average grades but high potential as evidenced by standard tests, consistent attendance and acceptable behavior. The program has about 300 students per year.
- **Career Academy Scholars Program:** This new program will have about 130 students by winter semester. This program is different from what is offered via the middle college high school in that it targets students who are interested in a specific career pathway and most likely have already begun related coursework at the high school level. Program staff noted that many of these students are first generation college students who prior to program participation did not anticipate ever attending college. Three high schools with large populations of low income students and an involvement in learning communities were chosen to participate, and more high

schools may become involved next year. Initial recruiting was conducted in existing ROP courses because it was assumed that currently enrolled students would already be invested in the subject matter and possibly interested in moving to another level.

- **Recruitment and Outreach:** Santa Ana College's student outreach department is overseen by the Dean of Student Affairs and links all activities to the larger student support work of the Santa Ana partnership to make the most of scarce resources. Staff is placed at the high schools to work as liaisons, disseminate information and facilitate student access to higher education. The outreach staff works in conjunction with a district-wide initiative to advance college-going by placing Higher Education Centers on each high school campus in order to provide students with counseling and information on higher education options. These centers also provide sessions for parents to learn more about how to send their students to college and the rights of immigrant students.

Through the Santa Ana Partnership, they also work with a cadre of secondary school parents, Padres Promotores, who visit more than 1,000 Santa Ana homes per year to help empower parents with critical information about the educational system, high school graduation requirements and college options. The Padres Promotores are bilingual parents trained to provide information on how to go to college. This is important because the population in their district is 95% Latino and 70% monolingual Spanish.

Application Procedures:

- **The Career Advanced Placement Program (CAPP):** Students must complete a CAPP application form and get it signed by a parent and their principal. Students

must also obtain college approval from the Division Dean or designee. Placement testing is required for students enrolling in English, Reading or Mathematics courses.

- **Middle College High School:** Students must be in 3 of five risk categories to participate. “District intermediate records are evaluated and students who qualify receive an invitation to attend a mandatory information meeting. Upon attending, the student/parent will receive an application and must call to schedule an interview within the timeline specified. The student and parent must participate in an interview with a representative from MCHS. The student's application and answers are scored using a rubric designed for our school. After all student applicants are interviewed, the MCHS application committee will review the applications to select our 2010 freshman class.”²¹
- **Career Academy Scholars Program:** Students are referred by either a high school teacher in the field they would like to enter or the Higher Education Coordinator at their high school... SAC involved high school principals as well as the Regional Occupational Program in the development of the program from the beginning to ensure that program pathways were designed with ROP courses, related high school occupational courses and high school graduation requirements in mind. Student high school GPA is only one of the factors taken into consideration for CASP admission, but also looks at school attendance, student motivation, and recommendations.

²¹ <http://www.sausd.us/14932011522115427/site/default.asp>

Program Components and Implementation

Staffing and Coordination: The programs are being coordinated by top administrators who wear multiple hats and are woven into the fabric of high school and college administration. As the Vice president of Student Services noted, “Our Partnership provides top leaders from the faculty, staff, and administration who are already working in these and related issues to design and implement innovative programs. This maximizes the resources that are available for direct support to students. This model also enhances the prospects of program sustainability, although the present fiscal environment is extremely challenging.

Instruction and Services:

- In the **CAP Program**, the student self-initiates enrollment into a community college class on an individual level. There are a range of students who participate this way, from home schooled students to students who are ready for an enrichment program of study. Participation is highest in the summer months or after the regular school day. However, Santa Ana has had to reduce class offerings by approximately 20% due to the budget crisis, so this program has been negatively impacted because class seats are simply hard to come by when demand is so strong and CAP students have a lower enrollment priority.
- In the **Middle College High School**, students attend high school and college courses on the Santa Ana College campus. The students receive a lot of specialized support and counseling in conjunction with their high school classes, but they are integrated into the larger Santa Ana College campus when they go to take college courses. They are not identified to instructors and can take any class that a regular SAC student can take and make use of campus services. Many of these students are working on their

AA degrees while in high school, and last year, ½ of their MCHS grads had their AA degree at the time of graduation.

- **Career Academy Scholars Program:** There are four career pathways for this program: 1) digital media arts, 2) international business, 3) auto detail hybrid program, and 4) welding. Students are involved in a rigorous program of study that is aligned with the A-G requirements. Students take their academic classes in the morning at their high schools, and then travel to SAC in the afternoons or on Saturday mornings to take part in college-level CTE courses. Students are transitioned into college expectations by attending initial classes composed primarily of high school students where college-level instructors can provide more intensive counseling and coaching prior to the students being “mainstreamed” into the general campus population. Instructors may assess students’ readiness for continued college instruction. This program uses grant funds to provide text book subsidies, counseling, and bus passes to students for transportation to the SAC campus. Many students do not have cars, so providing bus passes helps to remove one barrier to college access. This program is intended to attract students who might be only be interested in college via interest in a specific career pathway and to provide them with an education that would allow them the skills and freedom to choose an academic or career focus. It is different from Tech Prep in that the CTE courses are college level courses being offered via CE at the college campus. It is also different from a career academies model and other multiple pathways programs in the utilization of CE to provide college-level CTE courses.

CE Policy: There is no specific campus policy around CE or minors on campus. Students must abide by the general student code of conduct, and CE students are not identified to faculty, except in the initial phase of the CASP program.

Professional Development: There is no formal program of professional development for college faculty and staff to handle special admits, but the CE programs like CASP, MCHS, etc. do have extensive support services available to students and parents. In the development of the CTE pathways program, administrators brought together both high school and college faculty to develop the program and discuss how each course would address each of the specific disciplines: 1) digital media arts, 2) international business, 3) auto/diesel hybrid program, and 4) welding, including high school articulation and university transfer programs available regionally for students after high school.

High School/College Partnerships: Partnerships with local high schools, as well as with the entire pipeline (K-18) are long standing through the Santa Ana partnership, when executive leaders at every level came together to “declare war on the underdevelopment of students”. This partnership has spurred multiple initiatives, including the Higher Education Centers on each high school campus, which bring together high schools and CC, CSU and UC reps, as well as parents and others, to address college-going for local students. These centers are staffed by multilingual higher education specialists.

For the new CTE Pathways program, SAC approached the local ROP and SAUSD superintendents to initiate and plan the program. The principals at participating high schools redesigned the master schedule so that students could leave class on time to catch the bus to get to the SAC campus to take their CTE classes. The college and high school reps met with faculty from both institutions, and refreshed their articulation agreements.

Program Funding & Policy Impact

SAC administrators are concerned about the sustainability of their programs, particularly in a time of budget crisis. While they have actively sought grant funding to start programs and provide additional services for students, they note that most of these grants are fairly small and that they gain much more out of building partnerships across institutions to build and sustain their programs than they do out of grant-writing.

Costs for Students: CE students in grades 9-12 are not required to pay tuition, but students in grades k-8 are required to pay all college fees. In reality, they have few k-8 students enroll and there is some concern those students this young in general cannot do well in college-level courses. Administrators noted that their students' income level can serve as a barrier to accessing college. For the Career Academy Scholars Program, the college provides a textbook subsidy and also provides bus passes.

Services for Students: They utilize SB 70 funds and a small James Irvine Foundation implementation (\$50K) provided via the ARCHES (Alliance for Regional Collaboration to Heighten Educational Success) Multiple Pathways Initiative to cover the costs of textbooks and counseling for students in the Career Academy Scholars Program.

The Foundation for Community Colleges, via the Gates Foundation, provided \$135,000 annually for the Middle College High School, but that has been reduced to about \$80,000 due to budget cuts. This is used primarily for textbooks and counseling support.

Staffing: The faculty and staff associated with the programs described in this case study are funded through regular apportionment resources as well as a series of supplemental grants that have been referenced above.

Budget cutbacks and other challenges: In the past, the college also offered a program called College Now where specific series of college courses were offered on high school campuses, but this program has been minimized due to budget cuts. The courses are taught by community college faculty and open to the general public, but attract primarily high school students.

Evidence of Success

Santa Ana College works with other stakeholder groups and across institutions in the Santa Ana partnership to track and analyze student data to measure success of initiatives adopted by the partnership. SAC administrators stress that their programs are data driven and designed with evaluation in mind, hence program coordinators are charged with collecting data.

SAC has also received data and reports from NCrest (National Center for Restructuring Education , Schools and Teaching), which is conducting research nationally with the Bill and Melinda Gates Foundation and Jobs for the Future and has gathered statistics on the outcomes of the Middle College High School model.

Measuring Success: Administrators cited the following measures or indicators as some of their measures of success for CE programs:

- Program leaders expect that students in the Middle College High School program and in the Career Academy Scholars will be as successful as the regular admits taking the same college courses in terms of GPA and persistence.
- For these programs, they should be able to achieve comparable levels of student success across ethnicities for students enrolled in the MCHS and in the Career Academy Scholars Program.

The Career Academy Scholars Program is just starting this semester. Specific program goals and objectives include the following:

- **Demographics:** recruit and retain Latino students proportionate to their representation in the partner high schools.
- **A to G completion:** achieve an overall completion rate that is equal to or greater than the overall Orange County rate (40.9%).
- **Graduation rate:** achieve a 90% overall graduation rate among participants.
- **College-going rate:** 90% of program participants matriculate to higher education subsequent to HS graduation.
- **Course completion rate:** high school participants achieve course completion rates equal to that of regular college students in that program/pathway.
- **Progress Towards a SAC Occupational Certificate:** participating students to complete 35% to 50% of the coursework required for a career certificate before graduating from high school.
- **Student Aspirations:** 100% of participants self-report intention to attend college.

Indicators of Success: The Santa Ana Middle College High School is one of the highest performing schools in the district—despite one of the qualifications for attending being having at least 3-5 of the listed risk factors. Half of the 2008/2009 graduating class received an AA degree at the time of their HS graduation. The following table summarizes some statistics for the 2007/2008 cohort of Santa Ana MCHS students:

Table 8. GPA, Credits, and Passrate by Grade Cohort, SAC MCHS

2007-08 Cohort	On School Roster	Enrolled in college coursework	Cumulative Average		
			College GPA	Earned Credits	Course Passrate*
9th graders	79	72 (91%)	2.75	11.3	97%
10th graders	81	80 (99%)	3.03	23.3	96%
11th graders	79	76 (96%)	2.85	38.4	94%
12th graders	62	60 (97%)	2.62	38.1	89%
Total	301	288 (96%)	2.83	27.4	94%

* Course passrate = percent of course grades resulting in a D grade or higher, out of all the coursework students took during high school that resulted in A, B, C, CR, D, and F grades.

Various staff and administrators working with students attending the first semester of the Career Academy Scholars Program noted that the program had recruited many first-generation college students. They noted considerable impact on students' educational aspirations; many students who had not previously considered college an option intended to enroll in college as a result. They noted that the impact went well beyond the individual student participant as parents expressed excitement over the prospects of their students obtaining a higher education and younger siblings began to consider this option for the first time.

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APPENDIX A—INTERVIEW GUIDES

Round One Interviews with Community College Administrators

We are working on a study of concurrent and dual enrollment programs in California. Who on your campus would know the most about dual or CE (k-12 special admits) on your campus?

1. Would you be able to tell me more about your campuses CE programs (programs for high school students that allow them to receive college credit while still in college?)
 - a. (If yes, keep talking to this person or see if you can set an appointment)
 - b. If no: Who are the best people to talk to on your campus about these types of high school programs?
2. Can you briefly describe what CE programs your campus offers?
 - a. Is there any overarching coordination of these programs?
 - b. What resources and services are provided for CE students? Are there any customized services provided specifically for this group of students? (Probe: Tutoring, advising, counseling; assistance with the selection of courses, transportation, enrollment, the matriculation process, tutoring, mentoring, early alert systems, etc.)
 - c. Do you provide any professional development for faculty and staff to develop and implement CE courses?
 - d. Does your campus have any formal policies around CE programs or minors on campus?
 - e. Does your campus have special outreach programs to make students, parents and high school staff aware of the CE offerings?
3. Can you describe the students who take part in your programs?
 - a. How many new special admits (K-12) to you have, annually?
 - b. What kind of student profile are you trying to recruit for CE programs?
 - c. What are the pre-requisites for special admits?
4. Does your college partner with any high schools to offer concurrent or dual enrollment programs?
 - a. If Yes: Which high schools?
5. Does your campus keep and report any outcomes data on success of these programs? (Please describe.)
6. Do you charge tuition for high school students taking classes at your college?
7. May we call you back to follow up?
8. Is there anyone else at your campus we should contact for more info on these programs?

- a. If yes: Can I get their contact information?
- 9. Can you recommend other community colleges with successful CE programs or other colleges whose programs you have used as a model? What makes them successful, in your opinion?
 - a. If yes: Do you have the names and/or contact information for staff at any of the CE programs you might recommend?

Round Two Interviews with Community College Administrators for Case Studies

(Tailor based on prior answers to screening questions—may not need to ask all of these questions if answered thoroughly in screening interview)

1. Can you please tell us a bit about the history of your CE program (s)?
2. In round one, we heard....Can you talk a little bit more about how these partnerships with high schools are structured?
3. How are your CE programs funded? Do you have any additional funding streams besides ADA/FTES? What kinds of activities, services or resources do these funds cover?
 - a. How are you utilizing your SB70 funding—is any of it used to support your CE programs?
4. Do you have any staff dedicated to supporting your CE programs? What are their roles?
5. Where are your CE courses held? Are any of these courses held on high school campuses? If so, why? What types of programs have courses on HS campuses and which are on CC campuses?
6. Have there been any specific challenges with having minors on campus?
7. How have the parents of participating minors been involved in their children's CE experience?
 - a. If yes: what has that been like and how has it impacted your program?
8. How have faculty responded to CE students in their classes?
9. We are trying to define what makes a CE program "successful." How does your CE program define success? What indicators do you look for in your program(s) to indicate success?
10. What kinds of outcome data, if any, does your campus keep to document the success of these programs?
 - a. Can you share any of your outcomes data with us?
 - b. What is the attrition, if any, like? (What proportion complete their courses?) What are your thoughts about this?

- c. How do you retain your special admits?
11. Are there any particular components of your program that you think are the drivers of this success? What are they?
 12. May we call you back for follow-up?
 13. Is there anyone else at your campus we should talk to about your CE programs? We are interested in locating at least one faculty member who teaches CE students and any other staff or faculty you think would provide additional and useful information such as institutional researchers, counselors, administrators, etc.
 14. Is there anyone at one of the partnering high school campuses that you think we should speak with to get a rounded picture of this program?

Round Two Interviews with Community College Faculty for Case Studies

(Tailor based on prior answers to screening questions)

1. How did you become involved in teaching CE students/courses?
2. Have there been any special issues or concerns about teaching minors? Are there any unique challenges?
3. What are the benefits CE for the high school student?
4. Has your campus provided any specific training or orientation to teaching minors?
5. Has your campus provided any outline of campus policies around minors on campus or CE issues?
6. How much, if any, contact have does faculty generally have with the parents of minors in community college classes?
7. How much, if any, contact do faculty at your college have with staff or faculty at the high schools from which your CE students originate?
8. What are particularly exemplary practices your college has developed around offering CE programs?

Round Two Interviews with High School Administrators for Case Studies

(Tailor based on prior answers to screening questions)

1. How long have students from this school been taking part in CE programs?
2. How many students, on average, take part each year?
3. How would you characterize those students?
4. How are students and parents made aware of these opportunities?
5. Are any high school staff involved in teaching CE classes?
6. How much contact do you have with community college staff or faculty about these CE admits?

7. How much contact do you have with students and parents about their experiences with CE classes?
8. Has your school adopted any policies around CE?
 - a. If Yes: What are these policies and how were they established?
 - b. Have there been any challenges to having your students enrolled in these programs?
2. What are the benefits of these programs for high school students?
3. What are the benefits of these programs for the high school, and how does the high school help support these programs?
9. How do you define “success” for your CE program(s)?
 - a. Do you have any specific measures that are consistently tracked?
 - b. Who keeps these measures or conducts the research?
 - c. Can you share this information?

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