Early College High School Initiative

Designing and Financing an Integrated Program of College Study:

Lessons from the California Academy of Liberal Studies

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PART OF A SERIES OF DESIGN BRIEFS ON MODELS FOR EARLY COLLEGE HIGH SCHOOLS

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About the Early College High School Initiative

Early college high schools are small schools from which students leave with not only a high school diploma but also an Associate's degree or up to two years of college credit toward a Bachelor's degree. By changing the structure of the high school years and compressing the number of years to a college degree, early college high schools have the potential to improve graduation rates and better prepare students for entry into high-skill careers.

The Bill & Melinda Gates Foundation, along with Carnegie Corporation of New York, the Ford Foundation, and the W.K. Kellogg Foundation, is funding the Early College High School Initiative. By 2008, the 13 partner organizations will create or redesign more than 180 pioneering small high schools. Jobs for the Future coordinates the Early College High School Initiative and provides support to the partners and to the effort as a whole.

Early college high school planners and their higher education partners are experimenting with a variety of configurations for curriculum, staffing, and student support. *Designing and Financing an Integrated Program of College Study* is the first in a series of briefs that focus on the academic and organizational design of the college component and ties those key features to a sustainable financing model. Jobs for the Future will continue to identify and document emerging designs to help guide and strengthen the efforts of early college high school developers.

Jobs for the Future seeks to accelerate the educational and economic advancement of youth and adults struggling in today's economy. JFF partners with leaders in education, business, government, and communities around the nation to: strengthen opportunities for youth to succeed in postsecondary learning and high-skill careers; increase opportunities for low-income individuals to move into family-supporting careers; and meet the growing economic demand for knowledgeable and skilled workers.

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Lessons from the California Academy of Liberal Studies

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Acknowledgements

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Introduction

By engaging students in up to two years of demanding college-level work while still in high school, early college high schools are testing a powerful strategy for closing the achievement gap and "doubling the numbers" of low-income youth earning a college degree.[1] But, as pioneers of a new educational approach designed to blend high school and college into an advanced program of study accessible to all students, these schools and their college partners are venturing into largely uncharted waters.

This brief examines how one early college charter high school, the California Academy for Liberal Studies, and its college partner, Los Angeles Trade-Technical College, are addressing a critical design challenge facing early college high school developers: how to structure and finance an integrated sequence of college study in which students earn up to two years of transferable college credit. The key features of the college component of the school's design are described, along with the educational and financial rationale and the budget and financing plan. The strengths of the design include how it prepares and supports students who enter school with limited academic skills and English language proficiency to succeed in college classes and how it capitalizes on opportunities and neutralizes obstacles in the policy and funding environment in California.

Though early in the implementation stages, the early college high school design developed by the California Academy for Liberal Studies (CALS) and Los Angeles Trade-Technical College (LATTC) offers an instructive model, not only for early college school developers operating in California but for all school developers who are striving to make a rigorous, college-level course of study accessible to all students, regardless of their incoming academic skill levels.

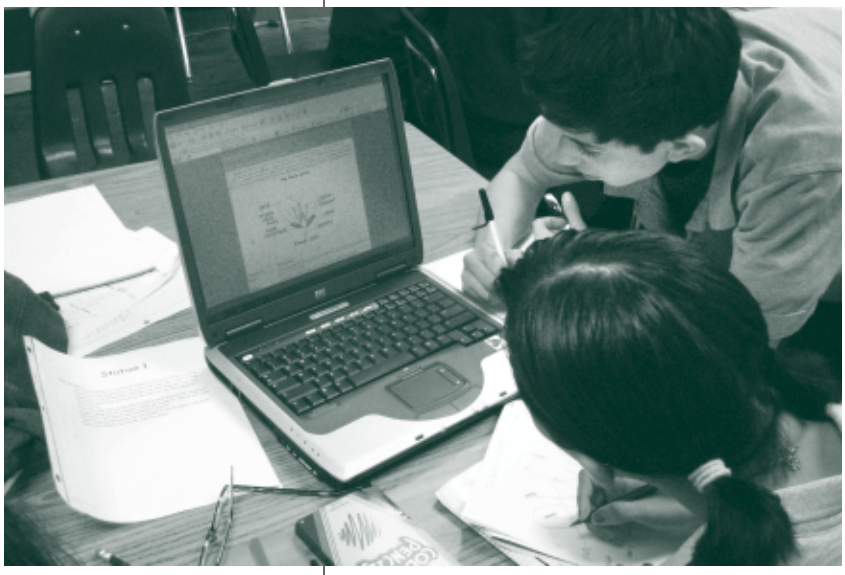
CALS is supported by the National Council of La Raza, an intermediary organization working to create 12 early college high schools that serve Latino communities. The grade 6-12 early college model represented by the CALS design is one that NCLR advocates as a replicable design. Early results show that it gives academically underprepared students and students with limited English proficiency the instructional time and sustained support needed to help them engage in college-level work by grade 10 or 11.

CALS students significantly outperform their peers on state exams. On the 2004 California Algebra I exam, 53 percent of CALS students scored at proficient and advanced levels compared to only 7.5 percent of Los Angeles Unified students and 20 percent of students statewide.

The School

The California Academy of Liberal Studies Early College High School (CALS ECHS) is the upper division of a well-structured, grade 6-12 instructional program designed to prepare all students for entry into the state's public university system. By the end of grade 12, CALS students will earn enough credits to qualify for sophomore standing at a University of California or California State University campus, in addition to fulfilling all UC admission requirements. Students who choose not to apply to a UC or CSU campus for admission after graduating CALS can choose a thirteenth-year option designed to help them complete the requirements for an Associate of Arts degree at LATTC.

Both the early college high school and its feeder middle school, located on a separate campus, grew out of founding director Ref Rodriguez's vision of a school that would take students from low-income, working-class Latino neighborhoods and ensure that they graduate from high school equipped with the skills necessary for success in college. Located in the heart of Los Angeles' financial district, CALS ECHS opened as a charter school in September 2003 with 84 ninth graders, most of them recent graduates of the CALS middle school. There are 73 tenth graders and 84 ninth graders enrolled for the 2004-2005 school year: 96 percent of the students are Latino and 87 percent qualify for free or reduced lunch. Most, 79 percent, come from homes in which English is not the first language. By 2006, the school will be operating at full capacity, with 320 students in grades 9-12.



The first-year outcomes for the founding ninth-grade class are impressive, with CALS students significantly outperforming their peers on state exams. On the 2004 California Algebra I exam, 53 percent of CALS students scored at proficient and advanced levels compared to only 7.5 percent of Los Angeles Unified School District students and 20 percent of students statewide. On the ninth-grade English Language Arts exam, 76 percent of CALS students scored basic or above, compared to 51 percent of LAUSD students and 68 percent of students statewide.

To deliver the college component of the curriculum, CALS has partnered with Los Angeles Trade-Technical College, a community college with a strong track record in preparing underserved high school students for college-level study. LATTC, which has provided dual enrollment college courses to thousands of Los Angeles area high school students over the past 15 years, views the partnership with CALS ECHS as an extension of its longstanding efforts to increase college enrollment and success for underserved students in the city. LATTC is one of nine colleges in the Los Angeles Community College District, which serves 130,000 students in 36 communities, educating almost three times as many Latino students and four times as many African-American students as all the University of California campuses combined. Over 90 percent of the students attending LATTC are students of color: 52 percent are Latino, 30 percent African-American, 7 percent Asian/Pacific Islander, 6 percent Caucasian, 1 percent Native-American, and 4 percent other.[2]

Key Design Features

Academic and Organizational Design of the College Component

The CALS core academic curriculum is designed to prepare all students for entry into the state's public four-year university system and, at the same time, provide students with the opportunity to earn significant college credits while in high school. The community college courses have been carefully selected to achieve these goals. Chart 1 maps the CALS program of study to the UC system's "A-G requirements," and it indicates the college credits that CALS students will earn each year.[3]

The concurrent enrollment courses outlined in Chart 1 fulfill high school graduation requirements and, when passed with a grade of C or better, satisfy lower-division requirements at UC or CSU campuses. Beginning in grade 10, CALS students meet their foreign language requirements by taking a three-year sequence of Spanish courses offered by the community college. In grade 10, LATTC Spanish professors come to the high school to teach the course; in grades 11 and 12, students will take Spanish classes at the LATTC campus. Starting in grade 11, students will also meet their English and Science A-G requirements through community college coursework. In addition to taking college courses during the school year, all students, beginning the summer after their freshman year, take a three-credit course at LATTC each summer.

By the end of grade 12, CALS students will earn up to 35 college credits in addition to fulfilling all UC admission requirements. As indicated in Chart 1, CALS students will earn 3 college credits in the tenth grade; 10 credits in the eleventh grade, and up to 13 credits in the twelfth grade, plus 9 credits over three summers.

Though the academic program is focused on meeting or exceeding UC admission requirements, graduating seniors who choose not to apply to a UC or CSU campus can enroll in a thirteenth-year option designed to help them complete the requirements for an Associate of Arts degree at LATTC. Students who select this option will receive ongoing counseling and support from their CALS faculty advisors and from LATTC counseling and academic support staff. The cost of college should not pose any obstacles to CALS graduates who opt to continue at LATTC. Because they come from lower-income families, the vast majority of CALS students will be exempt from college enrollment fees.[4] In California, any low-income student is entitled to have community college enrollment fees waived. CALS and LATTC staff will work together to ensure that thirteenth-year students secure Pell Grants and other financial assistance to cover other college-related costs.

Each year, students take an advisement course at CALS, which provides them with guidance around college-going issues specific to the UC and CSU systems. Every CALS faculty member is responsible for running an advisement class for 12 to 15 students and stays with the same group of students from freshman year through graduation. As students enter senior year, the content and nature of

Chart 1.
How CALS ECHS Meets University of California A-G Requirements

Requirements	9th Grade	10th Grade	11th Grade	12th Grade
A. History	Humanities 9	World History	U.S. History	Government
B. English	Humanities 9	English 10	English 101*	English 103*
C. Math	Algebra I or Geometry	Algebra II or Geometry	Algebra II or Trigonometry	Trigonometry or Pre-Calculus
D. Lab Science	Earth Science	Biology	Physical or Biological Science, including Physics and Chemistry*	Physical or Biological Science, including Physics and Chemistry*
E. Foreign Language		Spanish I: Spanish for Spanish Speakers*	Spanish I or Spanish II*	Spanish I or Spanish II or Spanish III or Spanish IV*
F. Arts	Drama, Art, or Music			Drama, Art, or Music*
G. College Prep Electives	Advisement 9	Advisement 10	Advisement 11	Advisement 12
College Credits Earned Each Year	3 summer credits	3 credits *plus* 3 summer credits	10 credits *plus* 3 summer credits	10-13 credits

** Denotes classes that will or may be taken at the community college as concurrent enrollment, earning both high school and college credit*

advisement will shift, from establishing college goals to navigating the admissions and financial aid processes. A full-time college guidance counselor will provide the primary support to students throughout the college application process and support faculty in structuring their advisement classes.

Supporting Students in Their College Courses

Though CALS students are just beginning to experience college courses, the program will include extensive tutoring and mentoring support for students in that phase of the design. On the days that eleventh- and twelfth-grade students are not in their college English or science classes, they will attend support classes delivered by CALS English and science teachers. These support classes will provide students with assistance on homework assignments, guidance on how to grapple with difficult readings or concepts, and coaching on important research and study skills, such as note-taking and reading for understanding.

By starting in middle school, CALS can prepare all students, particularly those who enter school with weak academic skills or limited English proficiency, to begin college-level work by the tenth grade.

Students will also receive tutoring support for the college Spanish classes, but this support will be delivered by a combination of college faculty and tutors. In 2004-05, the two LATTC professors teaching introductory Spanish to CALS tenth graders come to the school on Friday afternoons to work with students who are in danger of failing the class. Two Spanish tutors also come after school on Mondays and Wednesdays to work with other students who are having difficulty in the course. These tutors, who are paid $15.00 an hour to ensure a commitment, are available to students four hours each week. One tutor, an immigrant from Guatemala, is a credentialed teacher and administrator in her home country but is not qualified to work as a teacher in the United States. The other is a senior majoring in Spanish at Loyola Marymount University. For the spring semester of this school year, CALS plans to supplement the once-a-week tutoring provided by LATTC professors with several undergraduate volunteer tutors from Occidental College's Center for Community Based Learning who are majoring in Spanish and seeking an educational placement to meet their service-learning course requirement.

CALS students enrolled in college courses can also tap into LATTC's academic support offerings, from study groups to individual tutoring. For example, all CALS students enrolled in English 101 will receive writing support at the LATTC Learning Skills Lab, a required component of that course. The college also has an early alert system for students in jeopardy of failing. Warnings go directly to students, and it is up to them to share that information with CALS staff.

Preparing All Students for College-level Work

By starting in middle school, CALS can prepare all students, particularly those who enter school with weak academic skills or limited English proficiency, to begin college-level work by the tenth grade. The CALS middle school program emphasizes foundation literacy and math skills. This emphasis continues in the first year of high school. All incoming ninth-grade CALS students take a common college-preparatory program of study that includes double blocks of English and math. In addition to English 9 and Algebra 1, students take a humanities course with an English focus and "Mathletes," a course that explores the "why" underlying mathematical procedures. In the tenth grade, all students take English 10 and Geometry.

Instead of using a pull-out model, students with special learning needs participate in the same college-preparatory classes as their peers, receiving extra support from a resource specialist, who also works with CALS classroom teachers to create an inclusive classroom. By delivering a common honors-level curriculum with few electives in the ninth and tenth grades, the school can keep class sizes small in core academic courses geared to the A-G requirements. Each class has about 20 students.

Role of Place: Student Membership in the College Community

Experiencing the demands of college life is an important part of the CALS early college high school design. The advisement sequence is designed to help students explore and make the transition to college. As students mature both academically and socially, the emphasis shifts. By the eleventh grade, students will spend increasing amounts of independent time on the college campus, splitting their

day between community college and high school classes. The CALS leadership team located the high school in downtown office space, just two subway stops away from the LATTC downtown campus, in order to facilitate movement between the high school and the college.

All entering CALS ECHS students receive an LATTC student identification card that gives them access to the college's resources and facilities. Most CALS students get their first taste of college coursework during the summer between the ninth and tenth grades, when they take an elective course at the LATTC campus. All eleventh graders will be expected to take several classes at LATTC alongside other college students. For English 101 and other concurrent enrollment courses, which all CALS students are required to take to fulfill core academic requirements, CALS students will be grouped in a limited number of sections for scheduling purposes. For elective offerings at the college level, a CALS student may be the only high school student in the course.

Under either arrangement, CALS students will not be distinguished from their college peers in the class rosters LATTC professors receive. This arrangement does have a price, in that CALS teachers will not be able to communicate directly with their students' professors to resolve academic issues that may arise. Instead, it will be the students' responsibility to alert CALS teachers in advisement classes and tutoring sessions to any issues that require assistance. CALS is willing to make this trade-off in order to help students develop the skills to manage the demands of college life independently.

History and Management of the College Partnership

The partnership between CALS and LATTC is an outgrowth of the college's extensive history of involvement with Los Angeles schools, offering dual credit courses to thousands of students in a number of programs. The college's Department of School Relations, which oversees all K-12 programs, sees the early college high school initiative as the logical evolution of its efforts to create a well-structured route for Los Angeles high school students into and through their institution.

An existing articulation agreement between the Los Angeles Unified School District and the Los Angeles Community College District specifies the community college courses that can count toward a student's high school graduation and A-G requirements; it also governs the terms of the concurrent enrollment arrangement between CALS and LATTC. This district-wide, standard concurrent enrollment agreement has been of enormous benefit to the partnership, eliminating the need for time-consuming negotiations about which college courses should count for what type of high school credit and ensuring that LATTC credits earned by CALS students meet both state college and university admission requirements.

College involvement in the partnership is managed by Clara Frost, the director of LATTC's Middle College High School Program, which provides dual enrollment college courses to high school juniors and seniors after school and during the summer (or intersession breaks for Los Angeles high school students on a year-round calendar schedule). As director of LATTC's flagship dual enrollment program for high school students, Frost has deep experience working with administrative and academic department leaders to create college-course options for high school students. This experience has proven invaluable to the planning and management of the partnership.

Since the inception of the partnership, Frost has met regularly with Ref Rodriguez, the director of the charter management organization that oversees CALS middle and early college high schools, and Lisa Tremain, the principal of the early college high school, to plan the course of study and coordinate all aspects of the plan's implementation. The college has also involved academic department leaders in the curriculum planning process. For example, the head of LATTC's English Department has been meeting with CALS leaders to plan the English curriculum sequence and identify the skills students need to qualify for freshman-level English courses at the college.

While Frost manages the day-to-day implementation of the partnership, Dr. Raul Cardoza, Vice President of Academic Affairs, is responsible for making final decisions about the terms of the college's involvement in the partnership. Cardoza has been a strong advocate for the partnership within

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the senior leadership of the college and continues to play a key role in positioning the partnership as an important element of LATTC's long-term strategic growth plan.

Benefits to the College

The high level of commitment that LATTC has demonstrated in this early college high school partnership with CALS is reinforced by the many benefits the partnership offers to the college. Cardoza and other LATTC leaders see the partnership as advancing the college's strategic goals in several important ways. First, it creates a new pipeline of college-ready students to support the college's growth plan. The nine-member Los Angeles Community College District has been given permission by the state to grow 14 percent over the next few years. As part of that master plan, LATTC hopes to increase its student body from 13,000 to 15,000. The early college high school partnership with CALS offers a steady supply of area students who will not only boost enrollment numbers and state FTE payments but also bolster retention and completion rates.

By raising the local and national profile of the college, the partnership can help enhance the college's stature and reputation, making it more attractive to prospective students and faculty.

The partnership with CALS offers another important benefit to aid LATTC's growth plans: classroom space. The lack of affordable classroom space in Los Angeles is a serious obstacle to the growth of area community colleges. CALS ECHS, which leases space in a choice downtown office building, provides LATTC with highly desirable classrooms for evening, weekend, and summer use. The CALS middle school, located in northwest Los Angeles, also has space open for off-hours use. CALS has offered to make these classrooms available to LATTC as part of their overall agreement.

Finally, the partnership has the potential to support the growth of LATTC in less direct ways as well. For example, by raising the local and national profile of the college, the partnership can help enhance the college's stature and reputation, making it more attractive to prospective students and faculty.

A Sustainable Financing Model

In developing their early college high school design, school leaders made financial sustainability a core requirement. By 2006, when the school is operating at full capacity, CALS ECHS expects to be able to cover expenses for its 320 students from current state and federal entitlement funds for secondary education. The school will not require any new funding streams to support college courses for its students. The projected budget includes the cost of enrollment fees and books for all college courses. Although enrollment fees are now waived for all concurrently enrolled high school students under an agreement between Los Angeles Unified School District and the Los Angeles Community College District, CALS leaders opted to develop a budget with very conservative financial assumptions in order to ensure that there would be sufficient funds to implement its design even if fee waiver rules change.[5]

The CALS early college high school design is not just revenue neutral compared to a traditional high school program; the integration of community colleges courses into the program of study could actually yield some small savings that would help the school maintain smaller classes for its high school courses and finance summer college courses. For example, by using LATTC college courses to provide foreign language instruction to students, CALS will be able to save approximately $85,000 a year that it can reallocate to other instructional needs while its students earn up to three years of college credit in Spanish. (See Chart 2 for an explanation of potential savings.)

CALS can take advantage of this win-win arrangement because of the low enrollment fees of California's community college system. At $28 per credit, or $84 per student for a three-credit college Spanish course, it will cost CALS $20,000 a year to enroll all 240 of its tenth, eleventh, and twelfth graders in college-level Spanish. Even factoring in the higher costs of books associated with college courses and the costs of providing paid tutoring support, enrolling 240 students in a three-credit college course at LATTC is projected to cost $46,320.[6] CALS can achieve a similar saving by substituting college courses for high school classes to meet the one year of college preparatory electives required for admission into the UC system.

As currently designed, CALS could also achieve more modest savings with its use of concurrent enrollment college courses to meet upper-level English and science A-G requirements. This savings is based on the delivery of complementary high school-based support classes for students enrolled in LATTC English and science courses. The CALS design substitutes college-level English and laboratory sciences courses at LATTC for eleventh- and twelfth-grade high school English and science classes, but it includes full-time science

Chart 2.
Potential Savings from Substituting College for High School Courses

	Cost as High School Courses	Cost as Concurrent Enrollment College Course	Potential Savings
Grades 10, 11, and 12 Spanish, 240 Students	2 FTE teachers = $127,050 Books, materials ($25 per student) = $6,000 Total = $133,050	Enrollment fees for 3 credit class ($84 per student) = $20,160 Tutoring support (24 hours per week @ $15 per hour for 36 weeks) = $12,960 Book, materials ($55 per student)* = $13,200 Total = $46,320	$86,730
Grades 11 and 12 English, 160 Students	2 FTE teachers = $127,050 Books, materials ($25 per student) = $4,000 Total = $131,050	Enrollment fees for 3 credit class ($84 per student) = $13,440 1 FTE CALS teacher for support class = $63,525 Book, materials ($55 per student) = $8,800 Total = $85,765	$45,285
Grades 11 and 12 Lab Science, 160 Students	2 FTE teachers = $127,050 Books, materials ($25 per student) = $4,000 Total = $131,050	Enrollment fees for 4 credit class ($112 per student) = $17,920 1 FTE CALS teacher for support class = $63,525 Book, materials ($55 per student) = $8,800 Total = $90,245	$40,805
Total Cost and Potential Savings	$395,150	$222,330	$172,820

* See note D, page 9.

and humanities teachers to provide a support class to the 160 juniors and seniors in college science and English.

Even after factoring in high school faculty support, it will still cost less to enroll CALS students in LATTC English and lab science courses than to teach these courses with CALS faculty. This is because CALS would need to employ twice as many faculty (i.e., 2 FTE English teachers and 2 FTE science teachers) to deliver upper-level English and science courses to 160 juniors and seniors. As illustrated in Chart 2, CALS could save approximately $45,000 per year in upper-level English instructional costs and $40,000 in lab science instructional costs through its early college high school design.

CALS is designed to be financially sustainable: the anticipated revenues come very close to matching costs.

The financial model developed by CALS and LATTC does not include any payments to the college for the administrative time of Frost or other college staff involved in planning and managing the partnership. Frost's salary is currently funded by a Middle College grant from the state. If that grant program is not renewed by the California legislature, LATTC will continue to finance management support for the partnership from internal sources. The Middle College grant is also being used this year to fund the enrollment fees of the college Spanish course that all CALS tenth graders are taking. But given the uncertainty of the program's future, the financial model developed by the partners includes the conservative assumption that these state funds will not be available after this year.

Other Design Considerations Driving the CALS Financing and Staffing Plan

The decision to provide supplemental high school faculty support to students enrolled in English and laboratory science courses was driven by several factors in addition to the general concern that students would need extra help adjusting to college-level assignments and demands. School leaders had particular concerns about the large class sizes of LATTC's introductory English and lab science courses, which can run as high as 35 students. Individualized tutoring from high school faculty will help provide students enrolled in these college courses with the academic guidance and feedback they need to produce high-quality, college-level work.

While designed to meet critical academic needs of their students, the inclusion of 0.5 FTE faculty support per 80 students enrolled in a college English or science class will also allow CALS to meet the state's instructional minutes requirement for full funding. According to California regulations, a school must provide students, on average, a minimum of 240 minutes of instruction per day by high school-funded faculty in order to qualify for its full per-pupil allotment from the state. This California law, which stands as a barrier to full implementation of early college high school designs that involve course-taking at more costly state college and universities, was designed to prevent secondary schools from "double-dipping" into state secondary school and college funds to finance the same class.[7]

Budget and Staffing Model

Table 3 presents the CALS budget and staffing model for its early college design. The budget figures are based on projected costs and revenues for the 2006-2007 school year, when CALS ECHS will serve its full capacity of 320 students in grades 9-12. Designed to be a financially sustainable model, the anticipated state and federal per pupil entitlement revenues come very close to matching costs: anticipated government entitlement revenues are $6,459 per pupil versus $6,527 in per pupil costs. Grants and contracts will cover the small gap between projected government per pupil revenues and costs ($68 per student or $21,760 total).

Table 3.
CALS Budget and Staffing Model, Projected 2006-2007

Staff		
Principal (1)	77,000	
Classroom teachers (16 FTEs)	840,000	$52,500 per teacher; see note A
Resource specialist (1)	42,000	See note B
College guidance counselor (1)	45,000	
School counselor (.33 FTE)	21,000	
Arts professionals	35,000	
Instructional aides (2 FTE)	26,000	
Clerical/office staff (3 FTE)	60,650	
Benefits	237,450	Approximately 21% of salaries
Operating and Capital Expenses (excluding college course expenses)		
Books and instructional materials	26,000	$25 per student per high school course
Student activities and supplies	16,000	$50 per student
Professional consultants	16,000	
Travel and conferences	18,000	
Insurance	25,000	
Utilities and housekeeping	45,000	
Facility lease	352,000	
Office expenses	18,000	
Capital outlays	33,800	Furniture, equipment, technology
Central administration fee	20,670	1%
College Course Expenses		
School-year enrollment fees	54,880	See Note C
School-year book costs	33,000	$55 per student per college course; see Note D
Summer enrollment fees	20,160	See Note E
Summer book costs	13,200	
Spanish tutors	12,960	24 hours a week at $15 per hour for 36 weeks
TOTAL EXPENSES	**$2,088,770**	**$6,527 per student**
Revenue		
State ADA per pupil allotment	1,690,848	$5,562 per pupil payment on 304 students (95% attendance rate)
Other state and federal payments	376,000	Includes Title 1 and special education funds; see Note F
Grants and contracts	25,000	
TOTAL REVENUE	**$2,091,848**	**$6,537 per student**

Explanatory Notes

A. The budgeted teacher-to-student ratio of 1:20 (16 teachers for 320 students) would ordinarily produce class sizes of 25 to 30 students. However, CALS keeps its class size at 20 students because of the additional FTEs that it gains by enrolling its students in several college courses. By using LATTC professors and courses to deliver up to three years of foreign language instruction, two years of science, two years of English, and up to two years of fine arts or other academic electives, CALS gains the equivalent of five or six FTE teaching positions. When these additional FTEs are factored into the equation, CALS budgeted teacher-to student-ratio is closer to 1:14.5 (22 teachers for 320 students).

B. CALS serves special needs students in regular classes, instead of using a pull-out model. Classroom teachers are trained to provide special needs support with assistance from the resource specialist who also provides additional help to students.

C. Estimated school year college enrollment fee payments of $54,880 are based on the following assumptions: 80 tenth graders take a three-credit college Spanish class; 80 eleventh graders take 10 college credits (Spanish, English, and lab science); 40 twelfth graders take 10 college credits (English, lab science, and a third year of Spanish or an academic elective); and 40 twelfth graders take 13 college credits (English, lab science, Spanish, and an academic elective). Cost of college credit = $28.

D. College book costs of $55 dollars per student per course are based on the following assumptions and estimates: the cost of books will range from $110 to $220 per semester course; the books will be current for one to two years, and CALS students will share the books for up to four semesters before the books need to be updated or replaced. For example, if half of the CALS students take a required college course during the fall semester (e.g., English 101) and the other half take it in the spring semester, then first-semester students will be able to pass their books along to second semester students.

E. Estimated summer college enrollment fee payments are based on the following assumptions: 240 rising tenth, eleventh, and twelfth grade students take a three-credit academic elective course each summer.

F. These revenues include special education, Title 1, and other small state allocations, such as economic impact aid, block grant, and lottery funds. The school's eligibility for Title 1 funds and other allocations targeted to high-poverty schools is based on an estimate that 85 percent of its 320 students qualify for free and reduced lunch.

Using the CALS ECHS Design as a Guide

The early college high school design developed by CALS and LATTC provides a coherent sequence of college-level course work accessible to all students at a cost comparable to traditional high school programs. While the CALS model is new and just getting off the ground, the thinking behind it is well-developed, providing important insights on how to deliver the key features of an early college high school design. The program of study developed by CALS and its partner, LATTC, offers an instructive model, not only for early college school developers operating in California but for all school developers who are striving to make a rigorous, college-level course of study accessible to all students, regardless of their incoming academic skill levels.

A Clear Educational Goal

One strength of the CALS early college high school model is the clarity of the goal motivating the design. The high school and college partners were able to plan backwards from the clearly stated goal of preparing every CALS student for entry into the state four-year university and college systems and to use that benchmark to identify an appropriate course of study and sequence of college courses.

Another strength of the CALS design is its ability to begin preparing students in middle school for the rigorous demands of the early college program of study. By making the early college high school an extension of a successful middle school program, CALS leaders have a solid foundation for getting all students, regardless of their incoming literacy skills or level of English language proficiency, ready to begin college-level work by tenth grade.

Adapting to the State Policy Environment

The CALS design also balances the opportunities and challenges posed by California's education policy and funding environments. It capitalizes on two main advantages of the California context for early college high school developers: the low cost to high schools of community college concurrent enrollment courses and a clearly articulated system for the transfer of community college credits to the state four-year college and university systems.

The ability of community colleges to collect FTE payments from the state for its concurrently enrolled high school students and the low student fees set by the state result in low costs of these course to high schools. Thus, CALS can save money by substituting college courses for high school courses, even after covering the higher cost of college text books and the costs of deploying substantial CALS faculty resources to support students in college courses. The well-structured system in California for transfer from the community college to a public four-year college allows CALS and LATTC to design a sequence of college-level courses in which CALS students earn credits they can apply toward advanced standing at any California four-year public college or university. Some CALS students may wish to stay a thirteenth year at LATTC to complete their Associate's degree; the low cost of community college and a well-articulated transfer policy make this option both affordable and attractive.

Offsetting the opportunities of the California context are some disadvantages that the CALS design has been able to work around. The state requirement that schools provide a minimum average of 240 minutes a day of instruction (and offer 64,800 minutes of instruction a year) to qualify for full per-pupil payment (e.g., ADA) places a significant restriction on the use of concurrent enrollment college classes by early college high schools to meet high school graduation requirements. Early college high schools that enroll their students in courses offered by a public college cannot count those courses toward the minimum instructional minutes requirement. Instead, those courses must be offered as additions to the minimum school day. CALS has fashioned an instructional program that uses dual enrollment college courses to meet core A-G graduation requirements while still staying within the state's instructional minutes requirement; to do so, it adds support classes taught by CALS English and

science faculty as supplements to students' college English and science classes. While CALS would provide supplemental support to students in college courses regardless of the state's instructional minutes requirement, it would have more options for delivering that support absent the restrictive rule.

The CALS design also accommodates the state's instructional minutes requirement by adding a thirteenth-year option as a way for CALS students who wish to earn an Associate's degree to do so. Trying to include more than one year's worth of concurrent enrollment courses within the grade 9-12 design would have been problematic, given state rules.

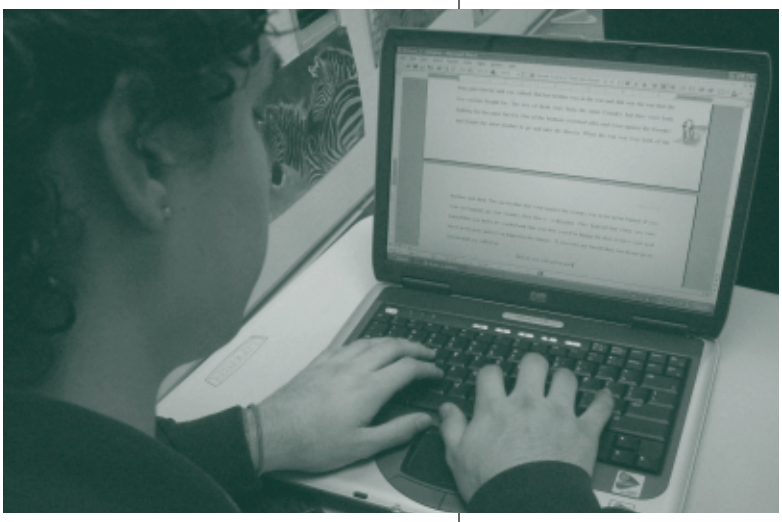
Balancing High School and College Instruction

The large size of most community college classes is another factor explicitly addressed in the CALS design. A downside of the low cost of community college is the high student-to-faculty ratio in most classes. To help ensure that students receive the level of personalized attention and instruction they need to meet the demanding A-G college preparatory standards, CALS has kept control of certain upper-level courses: math and history. This compromise not only addresses the state's instructional minutes requirements but also allows the partners to test out the optimum mix of instruction provided by CALS full-time faculty versus college instructors to achieve the academic goals of the program.

Collaborating with the College Partner

In LATTC, CALS found a college partner with a strong commitment to the mission of CALS and also a clear institutional interest in expanding its student enrollment, with the promise of additional state funds to support that growth. It is unlikely that CALS could have worked out such a favorable partnership arrangement with a college that did not have an aggressive growth plan or need for partners to help reach new markets. The CALS design also benefits from the preexisting concurrent enrollment agreement between the Los Angeles Unified School District and the Los Angeles Community College District, which provides a clear framework for designing the program's college-level course of study.

In LATTC, CALS found a college partner with a strong commitment to the CALS mission and a clear institutional interest in expanding its student enrollment.



Endnotes

[1] Jobs for the Future's *Double the Numbers* initiative is designed to deepen support for state and federal policies that can dramatically increase the number of low-income young people who enter and complete postsecondary education. The initiative identifies, assesses, and promotes new and promising approaches to increasing efficiencies and reducing inequities in secondary and postsecondary education attainment. *Double the Numbers* is supported by the Bill & Melinda Gates Foundation and the Ford Foundation.

[2] Office of Research and Planning at Los Angeles Trade and Technical College, Los Angeles Community College District, Fall 2003 Census Headcount and Breakdown.

[3] The requirements for entry into the University of California system are designed to ensure that entering students have attained essential skills and preparation for courses and majors offered at the university. Called the "A-G Requirements," they can be summarized as follows:

A. History/Social Science: two years required, including one year of U.S. history or one-half year of U.S. history and one-half year of civics or American government; and one year of world history, cultures, and geography

B. English: four years of college preparatory English that include frequent and regular writing, and reading of classic and modern literature

C. Mathematics: three years of college preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry

D. Laboratory Science: two years of laboratory science providing fundamental knowledge in at least two of these three disciplines: biology (which includes anatomy, physiology, marine biology, aquatic biology, etc.), chemistry, and physics

E. Language other than English: two years of the same language other than English

F. Visual & Performing Arts: one year, including dance, drama/theater, music, and/or visual art

G. College Preparatory Elective: one year (two semesters) of college preparatory electives are required, chosen from visual and performing arts, history, social science, English, advanced mathematics, laboratory science, and language other than English

[4] California Community Colleges do not charge tuition but do charge a per credit enrollment fee.

[5] The state also allows concurrently enrolled low-income students to apply for fee waivers if a group waiver agreement is not in effect between a community college and school district.

[6] College book costs of $55 dollars per student per course are based on the following assumptions and estimates: the cost of books will range from $110 to $220 per semester course; the books will be current for one to two years, and CALS students will share the books for up to four semesters before the books need to be updated or replaced. For example, if half of the CALS students take a required college course during the fall semester (e.g., English 101) and the other half take it in the spring semester, then first-semester students will be able to pass their books along to second semester students.

[7] From the state's point of view, the ADA per pupil payment it provides secondary schools is based on the cost of that school providing a minimum average of 240 minutes of instruction per day to each student, and offering students a total of 64,800 minutes (or 6 hours a day) of instructional options. If a school substitutes college classes for high school classes to meet a portion of its minimum required hours of instruction, and the participating public college receives state per pupil FTE payments for these enrolled high school students, then the state views this as paying for the class twice – first through its ADA payment to the secondary school and a second time through its FTE payment to the college. If student participation in college classes is above and beyond the required minimum hours of instruction, then the state does not consider this to be double dipping. The college can collect state FTE payments for these students while the secondary school still receives its full ADA payment. Secondary schools can substitute college courses for high school classes without violating minimum instructional hours requirements by contracting with public colleges to deliver these courses or by having their own teachers gain adjunct status and deliver the college courses themselves. As long as the college is not collecting state FTE payments for high school students under either of these arrangements, it is not considered double-dipping. For more information, see *Integrating Grades 9 Through 14: State Policies to Support and Sustain Early College High Schools*, by Nancy Hoffman and Joel Vargas (Jobs for the Future, 2005).

About the Authors

Susan Goldberger, Director of New Ventures at JFF, is responsible for promoting the development, testing, and scaling of new educational designs to help young people achieve academic and career success. Previously, she directed JFF's youth development and educational reform efforts, including a multi-city urban high school reform initiative. Prior to joining Jobs for the Future, Dr. Goldberger founded and directed several community-based organizations that advocated for improvements in health care, child care, and economic opportunity for low-wage workers. She holds a Ph.D. in social policy from Brandeis University and a B.A. from Brown University.

Leslie Haynes, part of the early college high school team at JFF, manages the initiative's peer learning events and technical assistance. She has researched and written about effective transitions to postsecondary options for underserved populations; her research and development projects are grounded in classroom practice and focus on youth development issues. Ms. Haynes has coauthored several JFF reports, including *Driving Change in Community Colleges* and *Better Outcomes for Low-Income Youth and Adults: Lessons from the MetLife Foundation Awards.* She graduated with honors from the University of the South and received her M.Ed. from Lesley College.

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