

College of the Canyons with the California Acceleration Project
Award for Innovation in Higher Education Application

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Contact Information

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List of Participants

- College of the Canyons, coordinating institution
- CAP, the California Acceleration Project, a professional development initiative that has supported 47 California community colleges to implement more effective and streamlined remediation pathways (cap.3csn.org)
- 3CSN, the California Community College Success Network, professional development arm of the CCCCO's Basic Skills Initiative which serves all 112 California community colleges (3csn.org)
- National Center for Inquiry and Improvement (<http://inquiry2improvement.com>)
- CEOs from the following California community colleges have submitted letters of support with this application to indicate interest in an ongoing partnership with CAP:
 - Berkeley City College
 - Irvine Valley College
 - Los Medanos College
 - Skyline College

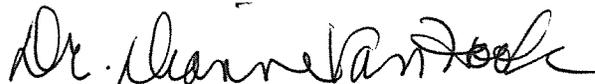
Application Abstract

The participants in this application are a subset of the 47 California community colleges that have transformed remediation by working with the California Acceleration Project. CAP was founded in 2010 by community college faculty and works in partnership with the state-funded professional development network 3CSN. CAP's goal is to substantially increase the proportion of community college students who complete transferable gateway courses in math and English. National and statewide research has shown this to be a critical early momentum point toward transfer and degree completion. A study by the Research and Planning Group found that colleges working with CAP have seen "large and robust" increases in completion of gateway English and math courses among students in redesigned, accelerated pathways, with significant decreases in achievement gaps. In 2014, CAP launched a new phase of work focused on scaling up these results. In addition to expanding the existing faculty training program, CAP brought together faculty, administrators, and researchers to create a blueprint of recommendations that the state's 112 decentralized community colleges can use to transform placement and remediation. The blueprint includes CAP work in accelerated remedial pathways, but it also features additional evidence-based approaches that few California colleges are using. In 2015, the recommendations will be finalized and disseminated through 3CSN and other partner organizations, and five California community colleges will be selected to receive technical assistance to implement the recommendations, which will provide helpful information about putting the blueprint into effect on a larger scale.

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Assurance and Signature

I assure that I have read and support this application for an award. I understand that if this application is chosen for an award, my institution will be required to submit, for approval by the Committee on Awards for Innovation in Higher Education, a report indicating proposed uses of the award funds and, as the fiscal agent, will be responsible for distributing funds to any other participating entities. I also understand that if this application is selected for an award, my institution will be required to submit reports to the Director of Finance by January 1, 2018, and by January 1, 2020, evaluating the effectiveness of the changes described in this application.



Dr. Dianne G. Van Hook
Chancellor, Santa Clarita Community College District
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Question 1: Goals

The participants in this application are a subset of the 47 California community colleges that have transformed remediation by working with the California Acceleration Project. CAP was founded in 2010 by community college faculty and works in partnership with the state-funded professional development network 3CSN. CAP's goal is to substantially increase the proportion of community college students who complete transferable gateway courses in math and English. National and statewide research has shown completion of lower division requirements in math and English is a critical early momentum point toward transfer and degree completion.ⁱ

Over 80% of California community college students are designated "underprepared" for college work and placed into remedial courses in English and math,ⁱⁱ with students of color disproportionately represented in this group.ⁱⁱⁱ Attrition rates are high in remedial course sequences, and few students placed into remediation complete longer-term goals. According to the most recent statewide Student Success Scorecard, only 40% of "underprepared" students go on to complete degrees, certificates, and transfer-related outcomes in six years, compared to 70% for students designated "prepared."^{iv} Accelerating remediation holds the promise of dramatically increasing the number of community college students who are transfer-prepared in a shorter period of time.

With vision, professional development and technical support from CAP, 47 colleges have implemented new streamlined remediation according to CAP design principles. Students in CAP pathways take the same rigorous, transferable course in math or English as other students, but remediation is redesigned so that they can move more quickly into credit-bearing courses, typically saving one to three semesters of remediation. Approximately 10,000 California community college students enrolled in accelerated pathways at CAP colleges in 2013-14.

A third-party quasi-experimental study of the first 16 CAP colleges found that in effective models of accelerated English, students' odds of completing a transferable English course were 2.3 times greater than in traditional remediation; in accelerated math pathways, their odds of completing a transferable math course (Statistics) were 4.5 times greater. In a subsequent analysis, the researchers found that in CAP accelerated statistics pathways the achievement gap was eliminated in African-American students' completion of gateway math requirements.^v

Any effort to increase the number of bachelor's degrees in California must include community colleges. Two-thirds of first-time college students in the state begin their education in community colleges. Almost 51 percent of graduates of the California State University system and 29 percent of the University of California system transferred from a California community college.^{vi} It also must include significant changes to community colleges' approach to students they consider underprepared. According to Complete College America and the Education Commission of the States, "Remedial education, as it is commonly designed and implemented – that is, a sequence of several semester-long courses that students must complete before gaining access to a college-level gateway course – does not work." Transforming this system, they write, "is pivotal to the college completion agenda in states."

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Question 2: Students Served

The California Acceleration Project serves the entire California community college system. Through our partnership with the California Community Colleges' Success Network (3CSN), CAP is partially funded by the Chancellor's office to provide professional development for the state's Basic Skills Initiative. The statewide Student Success Profile therefore serves as a profile of the students we serve.

Statewide Student Success Scorecard Profile for 2012-13

STUDENT INFORMATION			
Students		2,292,252	
GENDER		ETHNICITY/RACE	
Female	53.0%	African American	7.2%
Male	45.9%	American Indian/Alaska Native	0.5%
Unknown	1.1%	Asian	11.5%
AGE		Filipino	2.9%
Less than 20 years old	24.1%	Hispanic	38.3%
20 to 24 years old	31.8%	Pacific Islander	0.5%
25 to 39 years old	26.7%	White	30.2%
40 or more years old	17.4%	Two or more Races	3.2%
Unknown	0.0%	Unknown	5.7%

The California community college system has the most ethnically diverse student body of the state's three public higher education systems and the highest proportions of low-income and first-generation college students. Full-time students have an annual median income of \$16,223, and a quarter of these students have annual incomes of less than \$5,544.^{vii} Approximately 5% of California community college students receive support from Disabled Students Programs and Services.^{viii} While we do not have exact figures on the percentage of veterans enrolled statewide, nearly 42% of California veterans receiving GI educational benefits attend a community college.^{ix} The state's Foster Youth Success Initiative is currently working on data systems for identifying and tracking former foster youth.

In 2013-14, over 10,000 students participated in accelerated remediation at CAP colleges. We have not compiled a statistical profile of all these students, but the Research and Planning Group's evaluation of 2,500 students at the first 16 CAP colleges provides a snapshot of the students in accelerated pathways. Overall, CAP students were more likely to come from groups at risk of poorer academic outcomes. In both English and math, CAP accelerated pathways enrolled twice as many African-American students as the state average and two to three times as many students with disabilities. In English, CAP pathways enrolled 1.4 times as many Hispanic students as the state average and only a third of the white students.

Remediation reform is particularly critical for underrepresented students of color, who are not only disproportionately placed into remediation, but more likely to have to take multiple semesters of non-credit-bearing remedial courses. These remedial courses delay – and often derail – their progress toward degrees and transfer. National and California-wide research shows that students

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required to take multiple semesters of remediation are much more likely to drop out of college than other students. In fact, for each additional layer of remediation required, student completion of a critical early momentum point drops precipitously.

**Completion of Transferable English/Math Requirement within 3 Years
All California Community Colleges**

Students' Starting Place in English/Math	% Completing Transferable English Course	% Completing Transferable Math Course
One level below transferable course	48%	34%
Two levels below transferable course	34%	15%
Three or more levels below transferable course	19%	6%

Fall 2009-Spring 2012, Statewide Report, Basic Skills Cohort Tracker

Statewide, more than half of Black and Hispanic students are placed into the lowest levels of math, the group with the 6% completion rate of transferable courses. This is perhaps the single biggest factor in the lower transfer and graduation rates for these students in California – community colleges are losing the vast majority of Black and Hispanic students at the front door, inside long remedial math sequences. Data like these have led researchers to identify remediation as a critical equity issue for students of color. In the forthcoming AACU publication *America's Unmet Promise: The Imperative for Equity in Higher Education*, researchers from USC's Center for Urban Education write that disproportionate remedial placements exacerbate socioeconomic disparities and contribute to lower "retention and completion rates, graduate school participation rates, and access to opportunities for deep and engaged learning throughout their postsecondary careers."^x

While multi-layered remedial course sequences place students of color at a structural disadvantage, the reforms we advocate in CAP flatten these sequences, enabling all students to make more rapid educational progress and particularly benefitting those placed into multiple semesters of remediation. In addition, our new strategies for changes to placement and remedial support that runs concurrent with transfer level work have a strong evidence base for increasing the proportion of all students who completion transferable math and English and decreasing equity gaps. See Question 4 for more detail.

Question 3: Innovations in Place Prior to January 2014

The California Acceleration Project was launched in June 2010, with an article by co-founders Katie Hem & Myra Snell in the RP Group's *Perspectives* newsletter. The article demonstrated that high attrition rates are structurally guaranteed in remedial sequences and presented promising data from accelerated models at Chabot and Los Medanos colleges, where Hem and Snell teach. "While there are many possibilities for rethinking developmental education," they wrote, "significant change will only come if we can step outside the prevailing assumption that multi-level sequences are the best way to support underprepared students for the rigors of college. We will never increase completion rates for College English and math – and therefore increase the numbers of students becoming eligible for transfer and degrees – unless we shrink the length of our sequences."^{xi}

Between 2010 and January 2014, our focus in CAP has been to mobilize California community colleges to redesign remediation. In California's decentralized system, academic and professional matters are in the hands of faculty, so changing curricula requires making the case directly to teachers. CAP leaders have given more than 50 regional workshops across California since 2010. These workshops present data on the high attrition in remedial sequences and help faculty understand that improving completion of gatekeeper courses requires shorter pathways. Workshops also include compelling representations of accelerated classrooms, using classroom video, course materials, and sample student work to help faculty see that students are more capable than traditional remediation has assumed.

In 2011-12, we accepted our first round of applications from colleges to participate in an extended professional development program in English and math. We are now working with our 4th cohort of colleges and recruiting for our 5th. The CAP program is provided at no cost to colleges, but to qualify, they have to meet certain requirements. First and foremost, colleges must design new remediation pathways according to a set of CAP design principles. New pathways have to reduce students' time in remediation without changes to the rigor of the transferable gatekeeper course. In math, colleges also have to tailor remediation to students' chosen academic goals, providing accelerated statistics pathways to students in non-math-intensive majors rather than simply repeating all K-12 math topics. Finally, all colleges have to be willing to share data so that we can evaluate the impact of these pathways on gateway course completion.

With state funding through our partnership with 3CSN, faculty teams attend three intensive multi-day institutes during the year when they are piloting remediation reform. The institutes focus on classroom level issues, such as developing course materials, facilitating student engagement, responding to student work, embedding just-in-time remediation into college-level tasks, and addressing affective/emotional issues that can impede students' success. This kind of professional development is needed because acceleration doesn't just mean teaching the same things faster. For most faculty, teaching in an accelerated pathway involves a major shift in both what and how they've been teaching. (See appendix for summary of CAP instructional design principles.)^{xii}

Do the CAP design principles improve student outcomes? Yes. The Research and Planning Group for California Community Colleges (RP Group) recently released a quasi-experimental study of the first cohort of 16 CAP colleges, which found that, "participation in an accelerated pathway leads to reliable increases in student completion of transfer-level gatekeeper courses." In effective models

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of accelerated English remediation, students' odds of completing a transferable course were 2.3 times greater than in traditional remediation; in accelerated math pathways, their odds of completing transfer-level math (Statistics) were 4.5 times greater. In examining various student subgroups, the researchers found that *all* students benefitted from effective accelerated pathways – including all racial/ethnic groups, all placement levels, low-income students, ESL students, students with disabilities, students with low GPAs, and students who hadn't graduated from high school.^{xiii} In a subsequent analysis, they found that completion of transferable math quadrupled for African-Americans in CAP pathways and the achievement gap between African-American and Asian students was eliminated.^{xiv}

What have we learned prior to January of 2014 that has informed our work?

When we first began trying to mobilize faculty to transform remediation, we learned that it wasn't enough to for faculty to see remediation pipeline data from large national or California-wide studies, or even data from other colleges. They needed to analyze their own local data. This prompted CAP founders to partner with the RP Group, 3CSN, and the state Chancellor's Office in 2011 to create a new statewide tool, the Basic Skills Cohort Tracker. With a simple online interface, faculty from the state's 112 community colleges can pull up data on student progression through their college's remedial sequences, following cohorts of students from their first enrollment in a given discipline through their completion of transferable college-level courses. For example, if a faculty member at San Diego's Cuyamaca College wants to know how basic skills math students are doing, she can go to the Tracker, format her request with a simple pull-down menu, and immediately have her answer: 106 students started three levels below transfer in math in Fall 2008, and three years later, 3 of those students had completed a transferable math course (3%), including repeated attempts.^{xv} After the debut of the tool, it became much easier to mobilize people to address this problem. The Basic Skills Cohort Tracker won the Excellence in Research – Regional/Statewide Project Award in 2012 and CAP founders are among a small group credited with its creation.

Another important lesson we learned came from RP Group evaluation of the first 16 CAP colleges. In a nutshell, not all "acceleration" is equal. There was a lot of variation in the models piloted, particularly in English, and the effects varied. In the most powerful models, called "high acceleration" by the researchers, accelerated students could proceed directly to college English after passing the accelerated course. In other models ("low acceleration"), students' time in remediation was shortened but they were still required to take additional remedial courses or receive special administrative waivers. These models had little to no effect on completion of college English. This finding now informs the guidance we give colleges, and we no longer accept "low acceleration" models into CAP's professional development program.

Question 4: Innovations Initiated in 2014

A New Phase of CAP: Increasing Completion Across Entire Colleges

In a June 2014 *Sacramento Bee* Op-Ed, former state Senator and California Secretary of Education Gary K. Hart highlighted the CAP evaluation results and asked, "Why isn't accelerated remediation offered at all California's community colleges? Why are most students still stuck in the traditional system and dropping out at high rates?" Hart argued that the state should provide more resources to support community colleges to retool their remedial curricula. "We need to move beyond pilot projects and ensure that effective, accelerated remediation is available to all students, not just the lucky few."

Since the start of 2014, we've been asking the same questions that Hart asked in his Op-Ed. With the RP evaluation of CAP complete, we have rigorous, third-party evidence that effective accelerated remediation leads to "large and robust" increases in student completion of gateway English and math requirements, that it benefits all students, and that it can help to narrow equity gaps for under-represented students. We have accelerated pathways up and running in 47 of California's community colleges, with faculty champions throughout the state leading change on their own campuses. And we are growing: 2014-15 featured the largest-ever cohort in CAP's professional development program, with over 100 faculty participating. We have met our goal of mobilizing colleges across the state to pilot accelerated pathways. And yet, too many students are still being lost inside traditional remedial curricula.

We've shown we can increase student completion in accelerated pilot sections – now can we increase completion across entire colleges? That is the question we started working on this year. This summer, CAP applied for and received a \$400,000, two-year grant from the California Education Policy Fund to develop a blueprint for reforming remediation in California community colleges. As with all of CAP's work, our goal is to substantially increase the number of incoming students completing transferable gateway courses in English and math. Through the new grant, we are synthesizing the research on promising practices from across the country into a set of clear recommendations that California's 112 decentralized community colleges can use to move this needle. The blueprint will of course include the work we've done in accelerated remediation, but it will also feature additional evidence-based approaches that few California colleges are using.

In December of 2014 we convened a group of researchers, policy advocates, faculty and college leaders who have all contributed meaningfully to remediation and placement reform research, policy or practice. The group includes the Executive Director of the Institute for Higher Education Leadership and Policy at Cal State Sacramento, the Director of Research for the Career Ladders Project, Executive VP and the Senior Director of Data Science from Educational Results Partnership, the Assistant Superintendent/Vice President of Institutional Development from College of the Canyons, the Director of Research, Planning and Accreditation at Irvine Valley College, and faculty and deans from CAP colleges that have successfully scaled remediation reform. Members of the CAP Think Tank are currently working with the CAP, the Common Assessment Initiative, Career Pathways Trust, the new Institutional Effectiveness Technical Assistance program, and Common Core implementation studies. In its first convening, the Think Tank reviewed a compilation of research from California and other states and discussed draft recommendations in three major areas. Each is briefly summarized below.

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Recommendation #1:

Reforming Placement to Broaden Student Access to College-Level Courses

Four national organizations focused on increasing college completion have recommended that enrollment in college-level courses should become the “default placement” for many more students.^{xvi} This recommendation is supported by a growing base of evidence that allowing more students to bypass remediation and begin directly in college-level courses is a promising strategy for not only increasing completion of these gateway requirements but reducing equity gaps for under-represented students of color, who are disproportionately placed into remediation.

A bright spot in the college completion research is the finding that students are not as “underprepared” as we have believed. Two studies by the Community College Research Center have found that standardized placement tests – the primary mechanism community colleges use to assess student readiness for college-level courses – are poor predictors of students’ performance in college. One study examined data from a statewide community college system and found that placement tests in reading/writing explained less than 2% of the variation in students’ first college-level English grades.^{xvii} Another study of a large, urban community college system estimated that 40-60% of students placed into remediation could pass college English with a C or higher if allowed to enroll directly (between 51% and 69% of incoming students). In math, 40-50% of those placed into remediation were predicted to earn a C or higher if allowed to enroll directly in the college-level course (55% to 63% of incoming students).^{xviii} The researchers caution that the above estimates are modeled from the data available to them and that we can’t know for sure how students could have performed in a college-level course (after all, when students are placed into remediation, they’re blocked from enrolling). While this makes some faculty wary of the estimates, empirical data from colleges are beginning to confirm that many students placed into remediation could succeed if allowed to enroll directly in the college level.

Long Beach City College changed their placement policies so that the number of students starting directly in college-level courses tripled in math (from 9% to 31%) and quadrupled in English (from 13% to 59%). Pass rates inside the college-level courses remained steady, suggesting that many students excluded under the prior policy had been under-placed. Most important to our goals in CAP, completion of transferable requirements increased significantly across all ethnic groups, and equity gaps narrowed for under-represented students of color. African-American students benefitted most from the policy change, with their completion tripling in both English and math.^{xix}

Butte College has also recently changed their placement policy to double the number of students allowed to enroll directly in college English (from 23% to 48% of incoming students). As at Long Beach, pass rates in the course remained steady, completion of the college-level course increased substantially, and equity gaps narrowed. All students’ benefitted, and under-represented students saw the greatest gains. Completion of college English nearly tripled among African-American students and more than doubled among Hispanic students.^{xx}

While our policy recommendations for the new grant are still being formulated, we have already begun to make the case that community colleges need to change the way they place students into remediation and allow more students to enroll directly into college-level courses. The above research is being integrated into the trainings we provide in CAP. In addition, in November 2014, the Butte College results were featured in an article co-authored by CAP Director Katie Hern and

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Butte English Co-Chair Leslie Henson in the RP Group's *Perspectives* newsletter, which is disseminated to all 112 California community colleges.

Recommendation #2:

Allowing Under-Prepared Students to Enroll in College-Level Courses with Additional Support

Another strategy shown to produce substantial gains in student completion of transferable gateway requirements is allowing students designated under-prepared to enroll in special sections of college English and math with additional attached support. This approach – often referred to as co-requisite remediation – is an alternative to requiring students to take stand-alone remedial courses before enrolling in a college course. Co-requisite remediation not only expedites students' progress toward degrees by shaving off at least one semester of remediation, it has been shown to produce substantial gains in student completion of college English and math and to narrow equity gaps for students of color.

The Community College of Baltimore County has led the way in this approach nationally with its Accelerated Learning Program, ALP. The program enables students placed below college English to enroll directly in a regular college-level course if they co-enroll in a support class taught by the same instructor. An independent evaluation of ALP by the Community College Research Center found that Black students' completion of college English was 2.2 times higher in the program (increasing from 32% to 69%), while white students' completion was 1.8 times higher (increasing from 46% to 84%). ALP students also earned more college-level credits and were more than 15% points more likely to persist to the next academic year, pointing to the program's promise for longer term outcomes like transfer and degree completion.^{xxi}

In math, a randomized controlled experiment conducted at three urban CUNY community colleges provides an evidentiary gold standard that students who assess into Elementary Algebra can succeed in a college-level Statistics course with support. The study assigned over 720 students who placed into Elementary Algebra (2 remedial levels below transferable math) to one of three treatments: traditional elementary algebra, elementary algebra with workshop support, or college-level Statistics with workshop support. In a comparison of course pass rates (C or better), students placed directly into college-level Statistics with support outperformed students placed into the Elementary Algebra by 18 percentage points and those in Elementary Algebra plus support by nearly 11 percentage points. Students clearly did not need to take two remedial semesters before they could be successful in college-level Statistics.^{xxii}

The effectiveness of co-requisite remediation has led four national organizations, including Complete College America and the Education Commission of the States, to highlight this as a core strategy for increasing college completion.^{xxiii} States like Colorado, Tennessee, and Indiana are implementing co-requisite remediation system-wide as part of their college completion agenda, yet few California colleges have adopted this approach to date. The recommendations we are developing will emphasize this as a powerful way to build upon the successful work already in place at CAP colleges.

Recommendation #3:

Expanding accelerated pathways for under-prepared students

The final strategy emphasized in our draft blueprint is to scale up the powerful accelerated pathways being piloted throughout CAP. In particular, we advocate that colleges expand their

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offerings of single-semester remedial courses in English and math that are open to any student, lead directly into college-level courses, and are closely aligned with the curriculum of the higher-level gateway course students will take.¹

This strategy is again consistent with national college completion recommendations, which stress that for students with significant academic needs, colleges should “develop and implement accelerated options that minimize the time that students spend in stand-alone remediation.” CAP data show that these approaches produce reliable, large increases in student completion of gateway English and math courses across all student groups, including all racial/ethnic groups, students for whom English is not a first language, and students with very low scores on placement tests (those typically required to take 3 or more remedial courses).

The Community College Research Center (CCRC) recently published a synthesis of research findings from four different models of accelerated remediation in New York, Colorado, Maryland, and California. These findings confirm and build upon what we have seen in CAP colleges:

Overall, the research suggests that across a variety of approaches, accelerated developmental education is associated with increased enrollment in and completion of gatekeeper math and English. It also suggests that students who take accelerated developmental courses typically perform about as well in gatekeeper courses as their non-accelerated peers. In some cases, acceleration may also provide a boost to students’ overall college-level credit accumulation, furthering their progress along the path to a degree.^{xxiv}

On the last point, CCRC’s study of California’s Chabot College is particularly important. Because Chabot has offered accelerated developmental English for nearly 20 years, the researchers could examine data on students’ long-term outcomes. They found that accelerated students were not only more likely to complete the college-level gateway English course but that, after five years, they were 7 to 10 percentage points more likely to have transferred (or to be ‘transfer-ready’), and 4 to 6 percentage points more likely to have graduated. This study was one of the first to show that accelerating students’ completion of remediation can pay off all the way to these longer-term outcomes.^{xxv}

In explaining the results of accelerated remediation, CCRC researchers point to two key factors: 1) Traditional remedial course sequences provide “students multiple opportunities to drop out,” while accelerated pathways “limit the time students spend in developmental education [remediation], reducing the likelihood that outside commitments or events will pull students away from college,” 2) Traditional remedial courses are often poorly aligned with college-level courses, while accelerated models are more closely tailored to the skills and expectations of the college-level.^{xxvi}

While the evidence for accelerated remediation is strong, expanding these pathways is challenging because of the tremendous need for professional development. Faculty need to be convinced that the current approaches are not working, and they need to be supported to change what and how

¹ Our recommendations only address remediation in academic reading and writing, not ESL curricula for students who do not yet know the English language. Nationally, community colleges are still at an early phase of considering whether and how English language instruction can be offered in accelerated formats.

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they have been teaching. The need for professional development is particularly acute for accelerated Statistics pathways because the disciplinary background of most math faculty is in the Calculus-based, STEM world. Most community college math faculty do not have training in Statistics, yet Statistics is a popular student option for meeting lower division quantitative reasoning requirements for transfer. CAP has built its remediation reform strategies with a focus on the hyper majority of students who are in majors that are not math intensive. The task of supporting faculty to learn to teach in alternative remedial pathways that serve non-Calculus based courses requires content training in statistics as well as work with new curricula and pedagogy. We have been able to provide this to a core group of early initiators in CAP, but scaling up accelerated pathways statewide will require additional resources and attention.

In 2014, we took steps toward supporting this scale-up. For the first time, we invited colleges that had previously participated in CAP's professional development program to send a second round of faculty for training. (In past years, resource constraints and a desire to mobilize as many colleges as possible led us to prioritize colleges that had not yet participated.) More than three quarters of the colleges that participated in 2014-15 were sending a second team as part of their effort to scale up accelerated pathways.

Expected Impact of Work Launched in 2014

Our focus this year was to begin developing a blueprint of actionable, evidence-based recommendations that California community colleges can use to substantially increase student completion of gateway English and math courses institution-wide. These recommendations will involve major changes to colleges' current practices in both placement and remediation, and the potential impact on student completion is significant.

Given our current draft of the blueprint for change, and the research upon which it is based, we estimate that the proportion of students allowed access to transfer-level English in their first semester at a California community college could increase from approximately 19% to 80% (with approximately 30% taking a co-requisite support course.) The CCRC studies predict that course success rates in transfer-level English could decrease slightly (between 2 and 10 percentage points) but the overall completion of transferable English would skyrocket 50 percentage points. The Long Beach and Butte studies cited earlier also suggest similar impact with significant improvements in completion of transferable English, which is an early momentum point to meeting transfer requirements.

In math we project that access to transfer-level math would increase from 15% to 70% (with approximately 30% of students in co-requisite support). Since our focus is on the hyper-majority of incoming students who have interests that do not involve math intensive fields of study, most of these students would be placed into Statistics or other quantitative reasoning courses, either with or without co-requisite support depending upon the placement process. Again, we anticipate some drop in course success rates for transferable courses with an astronomical increase in overall completion rates of transfer-level math. The RP Group's Transfer Velocity Study showed that students placed directly into transferable math were twice as likely to transfer.^{xxvii} Subsequent research cited above suggests that a major explanatory factor here is not student capacity or preparedness, but rather the inevitable student attrition in our ineffective remedial pipelines.

Question 5: Innovations Planned for 2015 Onward

In the next two years, we have three main areas of activity in CAP, all of them focused on substantially increasing the number of California community college students who complete college-level English and math requirements. At colleges implementing CAP recommendations, we expect a substantial impact on this pivotal early completion metric (see Question #4).

1. Refining and disseminating blueprint for transforming placement and remediation
In early 2015, we will refine our draft recommendations in collaboration with the members of the CAP Think Tank, then elicit feedback from lead faculty at participating CAP colleges (two convenings scheduled for early spring). When the recommendations are finalized, we will disseminate them through our existing statewide networks, including a webinar and four regional workshops hosted by 3CSN (Spring 2015), a presentation to trustees at a meeting of the Community College League of California (May 2015), and written materials disseminated to all institutional researchers and Basic Skills Initiative Coordinators system-wide. We will also share the recommendations with colleges in the statewide Career Pathways Trust grant and colleges piloting multiple measures reforms as part of the Common Assessment Initiative (members of our Think Tank are leaders in these efforts). Colleges will be invited to apply to receive a year of technical assistance to help them implement the three recommendations locally.
2. Providing implementation support to 5 California community colleges
In 2015-16, through funding from the California Education Policy Fund, we will provide technical assistance to 5 community colleges to implement the blueprint recommendations. We will convene the colleges to work together on implementation plans, surfacing obstacles and challenges, and collaborating across colleges to develop solutions. We will also provide coaching and technical assistance between gatherings.

We anticipate that the colleges will use 2015-16 as a planning year to build internal support for reforms, change placement policies, train more faculty to teach in accelerated pathways, and ensure that administrative systems are in place (e.g., registration, assessment, advising). We anticipate that new placement policies and will be in place for the 2016-17 academic year and that a greater proportion of incoming students will have access to accelerated remedial pathways at these five colleges (at least 20% of those placed into remediation). We will also use the 2016-17 academic year to secure curriculum approvals for new co-requisite models to launch in 2017-18.

Working closely with a few early initiator colleges will provide a clear window into what it takes to implement these reforms in California, and we will capture the lessons learned in case studies and implementation guides to be used by other colleges.

3. Supporting California community colleges to launch and scale up accelerated remediation
In addition to the above new work with five colleges, we will continue to partner with the state-funded 3CSN professional development network to support the larger community college system to redesign and accelerate remediation in English and math.

In 2015-16, we will offer the fifth cycle of our faculty training program. This program

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involves three in-person gatherings where faculty engage with sample curricular materials and have the chance to learn from faculty experienced with accelerated pathways, helping them to shift from more traditional remedial instruction to accelerated approaches. As we did last year, we will invite colleges that have participated in the past to send new teams of faculty so that they can increase the number of accelerated sections offered locally.

The above activities will occur whether or not we receive an Innovation award. The challenge we face is simply one of scale. There are 112 community colleges in the state, and we need to increase our capacity to support them to make these high-leverage changes. As an illustration: this year we offered our largest-ever training program with 3CSN, with more than 100 faculty participating, but resource constraints meant that we had to reject 25% of the English and ESL faculty who applied. A final activity we will therefore pursue in 2015 is seeking additional private and/or state funding to do this work on a larger scale.

Question 6: Cost Analysis

The innovations emphasized in CAP decrease the number of remedial courses students take by placing more students directly into college-level courses (either with or without support according to the placement process) and providing accelerated remediation to the rest. The research cited previously makes clear that these changes can expedite and increase student completion, but they also have the potential for significant cost savings. Intuitively, it's clear that when a student doesn't have to enroll in so many semesters of non-transferable remedial courses, the costs of that student's bachelor's degree go down – both the costs borne by the student and by the state. Multiplied across the more than two million community college students, these savings can add up.

In 2012, CAP hired Dr. Rob Johnstone, President and Founder of the National Center for Inquiry and Improvement, to develop a cost efficiency tool to help colleges gauge the cost of the traditional remedial sequence and compare it to the accelerated CAP model. He focused on math pathways because there is a highly consistent structure across community colleges in math remediation and a single CAP model of acceleration in math. (His model does not take into account CAP's new recommendations about placement reforms or co-requisite support.) The tool uses 30 individualized inputs to project total pathway cost (including transferable course), cost of remediation, cost-per-completer of a transferable course, and percentage of cost spent in remediation.

Using blended data from the first seven CAP colleges working in math and data provided by the RP Group researchers working on the CAP evaluation study, the model estimates a 34% reduction in the cost of remediation, which is \$158,851 per 1,000 students. In addition, the cost per student completing a transferable math course drops \$1,169, which is a 47% decrease. The full set of inputs and associated outputs for these estimates are included in the appendix.

Dr. Johnstone also estimated savings to students and net wage gains based on the assumption that students bypass full semesters of remediation. Assuming a 1-year improvement in time-to-degree for CAP students (from 4.5 to 3.5 years), Johnstone estimated tuition and book savings of \$2,104, with estimated wage gains of \$24,600 (based on CCCCO Wage Tracker) due to earlier graduation.

The National Center for Inquiry and Improvement has agreed to produce another tool that will allow colleges to estimate the cost savings of CAP's new three pronged strategy of placing a larger portion of students directly into transferable courses, providing co-requisite support instead of a separate semesters of remediation, or a single semester accelerated remediation when necessary. As a short cut estimate of direct cost savings to the state of this new approach, we estimated the units of remedial math saved and multiplied by \$230 per unit (nonresident tuition minus in-state tuition.) We estimate a 43% reduction in the direct cost of remediation, which is over \$594,000 per 1,000 students. See spreadsheet on direct cost savings provided in the appendix for details.

Question 7: Potential Risks and Trade-Offs

When faculty first encounter the approaches we advocate in CAP, their most common concern is that students will be harmed. Many teachers worry that allowing students to avoid remediation or take an accelerated pathway will cause them to struggle, fail at high rates, and drop out of college discouraged. They are particularly concerned about students they consider at-risk, such as students with learning disabilities, students for whom English is not a first language, and students with very low placement scores (those traditionally placed 3-4 levels below college courses).

While this is a common concern, the research into accelerated models has found no evidence of students being harmed. In the RP Group's evaluation of the first 16 CAP colleges, every student sub-group examined had better results in effective accelerated pathways, including all racial/ethnic groups, students with disabilities, students who had taken ESL courses, students with low GPAs, EOPS and Pell grant recipients, students who had not graduated from high school, and students at all levels of the traditional sequence. "The implication is that students from an array of skill ranges can be prepared for success in transfer-level English or statistics," write researchers Hayward and Willett. "No specific placement level was associated with negative outcomes, indicating that these accelerated pilots adhered to a 'do no harm' principle."

In fact, the researchers found that students placed into the lowest levels are seeing the biggest gains in accelerated pathways. In a follow-up analysis, they examined descriptive data on students placed three and four levels below a transferable math course. Among these students, completion of a gateway math requirement was 2.7 to 7 times higher in accelerated statistics pathways than in the traditional sequence, with African-American students seeing the largest gains (their completion increased from 7% to 49%). This is a particularly important finding given statewide data showing that most African-American and Hispanic students are placed into these lowest levels.

The RP Group findings are corroborated by CCRC research into Chabot College's long-standing accelerated English course (a one-level-below college English course open to any student). Examining 1-year, 3-year, and 5-year student outcomes, the researchers concluded:

Our quantitative analysis leaves little doubt that enrollment in the accelerated developmental English course (relative to the two-semester option) is associated with better short-, medium-, and long-term academic outcomes. Even ESL students and students with lower placement scores – populations for which an accelerated model may be assumed to be less appropriate – appear to benefit in certain ways. Most notably, enrollment in the accelerated pathway is associated with positive long-term outcomes, such as earning transfer-ready status, transferring to a four-year college, and earning a certificate or degree.

Given the concern about this issue among faculty, we will continue to monitor disaggregated data from CAP colleges to ensure that reforms are not having an unintended negative impact on particular students. Overall, however, the available evidence suggests that rather than placing students at risk of disproportionate harm, accelerated pathways and placement reforms are a powerful lever for *mitigating* the disproportionate impact of our current approaches, particularly for low-scoring students and students of color.

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While we do not anticipate any negative consequences for students, colleges implementing these reforms at a large scale need to expect and plan for institutional impacts in several areas:

1. Enrollment management: CAP colleges have found that as they scale up accelerated pathways, they need to significantly increase the number of college-level sections offered to accommodate the number of students now making it through remediation.
2. Faculty assignments: As colleges reallocate existing resources from remedial to transfer-level courses, they run into challenges if faculty teaching lower-level courses are not credentialed and/or trained to teach at the higher level. Faculty who teach stand-alone remedial reading courses, for example, typically do not meet the minimum qualifications to teach college English. When Butte College changed its placement policy to double the number of incoming students starting at the college level, the English department had to scramble to find enough part-time faculty to meet student demand, while the remedial reading and writing department was cut by two thirds.
3. Faculty training: Changes to placement and course offerings often involve the need for additional training. At College of the Canyons, for example, as the math department has scaled up the accelerated statistics pathway, they have struggled to find enough faculty to teach statistics (most math faculty do not have a background in this area of mathematics and prefer to teach in the algebra-to-calculus pathway). Meeting student demand requires training math faculty to teach new content and skills.

These are the kinds of challenges that CAP supports colleges to address. Our experience with early initiator colleges alerts us to the issues that can come up and ways of approaching them, and we use this knowledge to help subsequent colleges anticipate and navigate challenges.

Question 8: Strengths and Assets for Sustaining Innovations

The community colleges participating in this award application have in common a shared commitment to sustaining accelerated remedial pathways that they put into place with CAP's guidance and according to CAP's design principles. At each college, this work has required a motivated team of faculty to take on a tremendous amount of work. They have had to facilitate the difficult departmental discussions that come with examining local student outcomes data. They have had to develop new courses to accelerate student preparation for rigorous transferable course work, and these new courses often challenge deeply held beliefs about how students learn and what they need. They had to get a letter of support from deans and presidents to ensure that they had institutional buy-in. They have had to effectively navigate departmental politics and the college's curriculum approval process, and to work with counselors, articulation officers, Admissions and Records staff, and administrators to make sure these innovative approaches are sustained. This is no small feat. This is labor intensive and emotionally charged work for which they have not received additional compensation. But it has happened at 47 of California's community colleges.

Why have they done it? Because they are motivated by a compelling CAP vision for improving student outcomes. Because they are invigorated by the transformations they have seen in themselves as teachers and in their students after implementing CAP design principles in their classrooms. ^{xxviii} Because the results have been so impressive.

What will sustain these changes? It is hard to imagine turning back. Significant improvement in student completion of gatekeeper courses in math and English is a core motivation. Equity plans call for strategies to narrow achievement gaps and CAP has made fantastic progress on this front in math. But the fact that these changes do not require ongoing financial commitments by the college also plays an important role. We have all seen grant-generated initiatives that are not institutionalized, and thus not sustained, after the money disappears. The transformations that CAP brings to a college do not have any additional costs. As described in a 2014 policy brief by Learning Works,

"While many interventions are considered cost-prohibitive to offer at scale, the study found that most CAP colleges did not provide accelerated students with costly wrap-around support like special counseling, tutoring, or financial assistance. Instead, the improved student outcomes were achieved largely through changes to instruction, supported by professional development to participating faculty. This suggests that accelerated remediation may be a highly sustainable strategy, in that it can be scaled up to serve more students without significant additional costs to colleges." ^{xxix}

The changes we advocate – placing more students into college-level courses and providing co-requisite support and accelerated remediation – reduce the costs of remediation and allow colleges to reallocate existing resources to courses that count toward transfer and degrees. This is a powerful motivator for college presidents and trustees struggling with resource constraints.

Another important factor in the sustainability and adaptability of these innovations is that CAP is a network, not a single institution. The network supports colleges by providing experience and expertise to help troubleshoot issues that arise with changes to remediation and placement. If one

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college hits a glitch, it is easy to find someone at another college in the network who has figured out how to handle the issue. Faculty from earlier years of CAP also help to support faculty in later cohorts by speaking at CAP events, sharing curricular materials they've developed, and being available by phone and email. In short, CAP is a grass roots movement united by a common goal and shared principles, with leadership distributed throughout the state. The work is magnetic, drawing educators and community college administrators to it in ever-greater numbers. The innovations do not depend upon a single institution: they are available to all community colleges, and the CAP network is what accelerates their spread.

Partnerships have also been critical to CAP's success. Our relationship with 3CSN, with funding from the state Chancellor's Office, has supported nearly five years of outreach and in-depth professional development that has touched all 112 community colleges. Funding from LearningWorks has enabled us to build a strong communications infrastructure, including several published briefs and an extensive base of web resources (<http://cap.3csn.org>). Our partnership with the Research and Planning Group has included developing an award-winning statewide data tool, evaluating student outcomes at 16 CAP colleges, and disseminating CAP work through publications and conferences that reach the entire system. We have also disseminated CAP work to presidents and trustees through the Community College League of California's events and publications. We are currently in conversation with Paul Steenhausen about how CAP might collaborate with the new Student Success Center, and we have begun working with policy/legislative advocates like the Campaign for College Opportunity and the Edge Coalition to disseminate CAP results and push for greater system-level attention to remediation reform. In addition, many colleges have stepped up to sponsor workshops or 2-day professional development institutes. Two colleges have served as fiscal agents for CAP grants, including College of the Canyons, which is serving as coordinating institution for this application. Another participant in this application is the National Center for Inquiry and Improvement under the leadership of Rob Johnstone. NCII created a tool for colleges to analyze the fiscal impact of their accelerated CAP math pathways, which we featured in our discussion of question 6, and, in the near future, will create additional tools to allow colleges to track the cost efficiency of CAP's new strategies in placement and co-requisite support.

Finally, project leaders and co-founders Katie Hern and Myra Snell have been critical to creating the CAP vision, mobilizing colleges, and securing funding for the work, including not only the state grant to 3CSN but private grants totaling \$780,000. Nationally recognized experts in remediation reform, Hern and Snell consult regularly with Complete College America, the Education Commission of the States, and Achieving the Dream, and they have led statewide workshops for 15 states to date. Their work has been featured in *Inside Higher Education*, *New Directions for Community Colleges*, *Change, Diverse Issues in Higher Education*, the *New York Times*, KQED public radio, and the "Scaling Innovation" project by the Community College Research Center.

Question 9: Strategies for Engaging Stakeholders

Because the community college system in California is decentralized, with local governing bodies that leave academic and professional matters in the hands of faculty, faculty are the most important stakeholders to engage in the effort to transform remediation. Since 2010, CAP faculty leaders have given more than 50 faculty workshops and webinars around the state, published numerous articles and policy briefs, and created a robust, faculty-oriented website that attracts 24,000 visits each year. In all of this work, we help faculty understand why remediation needs to be streamlined and redesigned, and we provide a vision for how to do this, drawing upon state and local data on student completion, research on placement, and inspiring windows into classrooms that illustrate student capacity. Nearly five years into the effort, we have a base of support that is both broad and deep, with faculty leaders redesigning remediation in almost half of the states' community colleges, and improved student outcomes that speak for themselves. This will not change in the event of new institutional leadership.

In addition to this grass-roots work, we collaborate with partner organizations to address wider audiences and create an echo chamber for change. For example, the Campaign for College Opportunity sponsored two Sacramento briefings in 2014 highlighting the success of accelerated remediation, with follow-up meetings with state legislative staff. The Community College League of California has invited us to present repeatedly to groups of college presidents and trustees, and we just published an article in CCLC's *Board Focus* magazine that introduces trustees to the high-leverage reform recommendations described in the Innovations section. These efforts help build commitment among system and institutional leaders to support faculty-led innovations.^{xxx}

Perhaps the most powerful strategy for engaging stakeholders is to invite students to tell their stories. City College of San Francisco student Lulu Matute is a perfect example. Lulu was born in Chicago to Honduran immigrant parents. Though she had passed four years of high school math, she took a year off after graduating and her math skills got rusty. She didn't realize the high stakes of the placement test, didn't prepare for it, and was assigned to the lowest remedial level. When she met with a counselor to create an education plan, Lulu saw that this placement meant she'd have to be at CCSF for three to three and a half years. Enrolling in the first course left her further demoralized. "A lot of the problems were very grade school," she recalls. "I remember my professor told us it was OK if we needed to draw dots to help us count. In high school, I had taken trigonometry, I had taken algebra and geometry, but here I was in college counting dots." Lulu was thrilled to discover the accelerated statistics pathway that CCSF had launched with CAP the year before. It was a perfect fit for her major, political science, and it not only reduced her time in remediation, it enabled her to finish her transfer requirements in two and a half years. Asked if she knows her GPA, she says, "Yeah, it's simple math – it's a 4.0." Lulu plans to enroll in the political science program at either UC Santa Cruz or UC Berkeley next fall, then go on to law school or graduate work in public policy. Ultimately, she sees herself running for public office. Reflecting on her experience, Lulu remembers sitting in that lowest level math class and looking around the room. "All the students in the class were students of color, students that looked like me." She said that they sometimes talked among themselves, wondering if there was something wrong with them. But taking the accelerated pathway and working with other student advocates, Lulu started to understand the problem differently. "It's not that we're not able to learn, not that we're not smart enough. The problem is the path."

Question 10: Changes Sustained With Existing Resources

As noted in questions #6 and #8, participating colleges have strong incentives for sustaining CAP innovations. They substantially increase student completion, narrow equity gaps, require no expensive add-on supports, reduce the costs of remediation, and enable colleges to reallocate existing resources toward transferable, college-level courses. These incentives will expand as colleges implement the new CAP recommendations (see Question #4). In short, once the innovations are in place at a college, sustaining them is not a challenge, requiring only modest ongoing professional development to address turnover among adjunct faculty.

Almost all of the resources required for CAP innovations occur at the front-end, to support colleges' initial implementation and expansion. Colleges need professional development and technical assistance to persuade faculty of the need for change, help them adapt their classroom practices to better support students, and change institutional structures (e.g., curricula, assessment processes, online advising).

Through our current grants and partnerships, CAP has the capacity to disseminate our new recommendations to all 112 colleges through webinars, online resources, and 5-7 regional workshops per year. Through the state BSI grant to 3CSN, we have the capacity to provide in-depth professional development to approximately 100 faculty per year to help them teach in accelerated English and math pathways and to launch a new train-the-trainer program that supports faculty leaders from our 47 colleges to provide trainings to their local colleagues. And through our recent grant from the California Education Policy Fund, we have the resources to provide a year of technical assistance to 5 of our existing 47 colleges to implement the expanded CAP recommendations. These five colleges will serve as exemplars for remediation and placement reform, and we will promote their successes in statewide and national community college to inspire other colleges to follow the lead of successful programs.

The bottom line is that existing resources will enable us to begin mobilizing colleges on our new recommendations and to support colleges to expand their current accelerated efforts. But as with all our work, the challenge is scaling up, both within and across California's 112 community colleges, which will require additional funding.

Question 11: Evaluation Measures

From the beginning our primary evaluation metric has been to track completion of gateway English and math requirements at colleges participating in CAP, comparing accelerated students with those in traditional remediation. In our future work, which includes a broader base of innovations, we will also monitor several related implementation outcomes.

Primary Student Outcome Measure

- % of incoming students completing college-level gateway course

Implementation Measures

- % of incoming students placed directly into college-level courses
- % of incoming students enrolling in co-requisite remediation models
- % of incoming students enrolling in accelerated remediation (one level below transfer)
- % of incoming students enrolling in traditional remediation (multiple levels below transfer)

Based upon our review of existing research, we believe that increases in the first three implementation measures will lead to increases in our primary student outcome measure. Over the next several years, as the innovations are scaled up, we expect that to see a corresponding increase in the gateway completion rate for students affected by these changes.

We will monitor this outcome closely, looking at college-wide data and data disaggregated by race/ethnicity, paying particular attention to the groups that comprise a significant proportion of the college's demographic. Are more students completing gateway courses, as we would expect? Are there completion gaps for under-represented students of color, and if so, are the gaps narrowing? This information will be used to refine our technical assistance to colleges. If, for example, we find that gaps are not narrowing for under-represented groups, and that students of color are still disproportionately excluded from college-level and co-requisite models, we might work with colleges to adjust their placement policies for more equitable access to college-level courses and adjust the types of co-requisite support students receive.

While it is beyond the target timeframe for this project, we expect that the increases in student completion of gateway courses would pay off on colleges' Student Success Scorecards in an increase in the proportion of incoming students who complete certificate, degree, or transfer outcomes within six years.

Question 12: Target Outcomes through 2018-19

The innovations described in this application represent a profound paradigm shift for community colleges. Statewide, fewer than 20% of incoming students are currently placed into college-level English and math. If the changes we advocate were fully scaled up at a college, that figure would shift to 70-80% of incoming students (some of them enrolling with additional co-requisite support). Under current practice, community colleges typically offer 2-4 levels of remedial courses below college in multiple subject areas (math, English, and sometimes an additional reading track). If our recommendations were fully scaled up, they would offer just a single, open-access course below transferable gateway courses in English and math, with some students also enrolled in concurrent co-requisite remedial support. Based upon the existing research, we think these are reasonable changes and that they would produce substantial gains in student completion and equity. But we recognize changes of this magnitude will not happen all at once.

What follows is a plan for how we envision implementing these changes at five participating colleges over the next several years, through funding from CAP's grant from the California Education Policy Fund. We will select the colleges from our existing 47-college CAP network. These colleges will be well positioned to be early initiators for the new recommendations because they already have successful accelerated remediation in place, championed by local faculty and administrative leaders. We envision phasing in the changes by starting with reforms that are simpler to implement in the short term under existing curricular structures, then moving on to establishing and scaling up new curricular models. We have not yet had an application process to determine which of our 47 colleges will participate in the technical assistance program. However, five of our existing colleges have submitted letters of support for this Award indicating an interest in continuing to work with CAP, and we have used data from these colleges to draft implementation targets and to estimate their impact on student completion.

2015-2016: Participating institutions work to expand offerings of CAP accelerated remediation to accommodate at least 20% of students placed into remediation in the math and/or English (whichever discipline(s) have participated in CAP professional development institutes). This includes professional development for faculty teaching in accelerated remedial courses. During this year, the college also works to revise placement policies to broaden student access to transferable math and/or English starting in 2016-2017.

2016-2017: Participating institutions implement changes to placement policy and allow substantially more students to take transferable courses. Based on the research cited previously, we are making relatively conservative estimates that 50% of incoming students should be eligible to take transfer-level English and 40% should be eligible to take transfer-level math. Recall that research from CCRC's study of a large urban community college system has estimated that in English 51%-69% of incoming community college students could earn a C or higher if allowed to enroll directly in a college level course, 55-63% of incoming students in math.

This year colleges also begin to develop co-requisite support for the transferable course. This will allow an even greater proportion of students to take transferable courses in their first semester starting in 2017-2018.

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2017-2018/2018-2019: Participating institutions implement co-requisite support options for transfer-level courses to further broaden access to transferable courses for students previously placed into remediation. Sections of traditional remediation further decrease.

If a college followed our recommendations and placed 50% of students directly into college English, we estimate that an additional 30% of incoming students could be successful in the college-level course with additional, co-requisite support. Because colleges are not currently offering co-requisite models, we would plan for a phase-in process, starting with a target of reaching 10% of incoming students in 2017-18 and expand to 20% in 2018-19.

In math, if a college followed our recommendations and placed 40% directly into a transferable math course, we estimate that an additional 30% could be successful with additional, co-requisite support. We would start with a target of reaching 10% of incoming students with co-requisite models in 2017-18 and expand to 20% in 2018-19.

In the appendix, we have modeled these implementation targets across the five colleges that have submitted letters of support, along with explanations of how we estimated baseline measures. Across these colleges, we estimate that incoming students' completion of college-level gateway courses would increase from 54% to 76% in English, and from 46% to 63% in math. Below is an example of target outcomes for one participating college in math (Skyline College).

	Skyline Math	Baseline	2015-2016	2016-2017	2017-2018	2018-2019
Placement	% in transferable math	23%	23%	40%	40%	40%
	% in traditional remediation	73%	62%	45%	35%	25%
	% in accelerated remediation	4%	15%	15%	15%	15%
	% in co-requisite support	0	0	0	10%	20%
	% completion of transferable course	43%	44%	50%	54%	57%

With regard to completion rates for students of color, if our recommendations are implemented, the research that we have cited suggests that colleges will see significant increases in completion rates for all ethnic/racial groups and a narrowing of the achievement gap. The later will be measured by the ratio of completion rates for Whites to completion rates for the lowest performing ethnic/racial group that comprises more than 5% of the college's enrollment profile. For example, for Skyline in math the baseline achievement gap is estimated to be 1.5 (completion rate of transferable math: Whites to Hispanics) and by the end of the academic year 2018-2019, we have set a target for 1.1, a drop of 27%, assuming placement and remediation reforms are implemented as we outlined above. See the appendix for targets for other colleges. It is important to note that the metric we are tracking – completion of transferable English/math across *all* incoming students – is not currently captured in any of the statewide data tools or reporting (e.g., Student Success Scorecard, Basic Skills Cohort Tracker), so this is will need to be part of the technical assistance we provide to our 5 participating colleges. We will also work with our partners in the Research and Planning Group to refine statewide data reporting to better track this measure and the proportion of students placed into/out of remediation.

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College of the Canyons with the California Acceleration Project
Award for Innovation in Higher Education Application

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December 8, 2014

To the Committee on Awards for Innovation in Higher Education:

I am writing to support the California Acceleration Project's application for an Innovation Award. This statewide faculty-led effort is playing a critical role in addressing the low completion rates among community college students placed into remediation. I serve as Executive Director of the statewide professional development network 3CSN, which is funded by the California Community Colleges' Chancellor's Office, and CAP has been one of our primary initiatives since 2011. We are incredibly proud of all that we've accomplished over the last four years and look forward to continuing this partnership in the future.

Through the 3CSN-CAP partnership, faculty and administrators from all 112 community colleges have participated in outreach and workshops about the need to transform remediation. We have also provided sustained professional development to 47 colleges to offer new accelerated English and math pathways for underprepared students. An RP Group evaluation of 16 colleges working with CAP found "large and robust" increases in student completion of transferable gateway courses, with gains across all demographic groups and placement levels. In effective accelerated English pathways, students' odds of completing a college-level course were 2.3 times higher than in traditional remediation. In math, accelerated students' odds of completing a transfer-level course were 4.5 times higher. A follow-up analysis found that the achievement gap for African-American students was eliminated in CAP accelerated math pathways. Further, an analysis by the National Center for Inquiry and Improvement showed that the accelerated math pathways offered in CAP enable colleges to lower their remediation costs and reallocate existing resources toward college-level offerings, while providing substantial savings to students through expedited completion.

The Innovation Award would enable us to expand our support to California community colleges. We would use the funds to help colleges scale up their accelerated pathways and consider additional high-leverage reforms for increasing equity and completion among incoming students.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Deborah L. Harrington'.

Deborah L. Harrington
Executive Director
3CSN: the California Community Colleges' Success Network
Dean for Student Success
Los Angeles Community College District





December 12, 2014

To the Committee on Awards for Innovation in Higher Education:

I am writing to support the California Acceleration Project's application for the Department of Finance Award for Innovation in Higher Education.

CAP is helping colleges like Berkeley City to re-envision remediation on behalf of their students. Across the state's community colleges, only 31% of students in math remediation complete a college-level math course in 6 years, and 44% of students in English remediation. CAP's evaluation results show substantial improvements in student outcomes for underprepared students with less time spent in remediation and no additional add-on costs to the college. In math, students' odds of completing a college-level course were 4.5 times higher in CAP accelerated pathways than in traditional remediation, and equity gaps for African American students were eliminated.

An Innovation Award will acknowledge CAP's contribution to improving student outcomes across multiple colleges. It will also highlight accelerated remediation as a crucial cost-effective strategy for achieving equity goals, improving rates of completion of lower division transfer requirements, and decreasing time-to-transfer for community college students.

Berkeley City College has worked with the California Acceleration Project since 2011, when we first launched our accelerated statistics pathway as part of the CAP professional development program. Our English and ESL faculty have also regularly participated in CAP events, sharing the results of their successful accelerated program with other colleges.

As President of Berkeley City College, I am enthusiastic about the potential for continuing our collaboration with the California Acceleration Project. We need the support and expertise in CAP to expand early pilots to reach more students, particularly in math. The CAP remediation redesign at Berkeley City is sustainable and has the potential for dramatic impact if our faculty are supported to teach these new courses on a wider scale.

Sincerely,

A handwritten signature in black ink, appearing to read "Deb F. Budd".

Dr. Deborah Budd
President, Berkeley City College



IRVINE VALLEY COLLEGE

5500 Irvine Center Drive, Irvine, CA 92618 | T: 949-451-5100 | www.ivc.edu

December 12, 2014

To the Committee on Awards for Innovation in Higher Education:

I am writing to support the California Acceleration Project's application for an Innovation Award.

Irvine Valley College is proud to be one of the 47 California community colleges in this faculty-led initiative to increase completion among students placed into remediation. With CAP support, our English department has created a streamlined curricular pathway that has cut in half the time students spend in non-credit-bearing remedial courses, enabling them to make faster progress toward degrees and transfer. Student completion of college English has increased dramatically, and faculty are enthusiastic about students' performance in the new course, which is more challenging than our traditional curriculum.

Our Director of Institutional Planning, Research and Accreditation was one of the researchers who conducted the third-party evaluation of CAP, which found "large and robust" increases in student completion of college-level English and math. The research team further found that the achievement gap for African-American students was eliminated in CAP math pathways.

An Innovation Award will acknowledge CAP's contribution to improving student outcomes across multiple colleges. It will also highlight accelerated remediation as a crucial and cost-effective strategy through which colleges can increase completion and equity without compromising access.

At Irvine Valley College, we are proud to have the third highest transfer rate in the California community college system, and we are always looking for ways to help more students achieve their goals. Our ongoing collaboration with the California Acceleration Project is critical to that work.

Sincerely,

Glenn R. Roquemore, PhD
President

LOS MEDANOS COLLEGE

Office of the President

December 16, 2014

Dear Selection Committee:

I am writing in support of the California Acceleration Project's (CAP) application for the "Awards for Innovation in Higher Education."

The California Acceleration Project was co-founded in 2010 by a Mathematics Professor here at Los Medanos College (LMC). CAP supports LMC and other colleges to redesign, streamline, and accelerate remediation – all toward the goal of improving completion of college-level gatekeeper courses in math and English. Within four years, CAP has supported 47 California community colleges to implement accelerated remediation. To date, 23 California community colleges have developed alternative remedial math pathways based on the LMC model. Here at Los Medanos College, faculty teams in both math and English have participated in the intensive year-long CAP professional development program.

At LMC, our internal research indicates that underprepared students in accelerated math remediation are three times more likely to complete transferable math than students in traditional remediation. A third party evaluation of the first 16 CAP colleges shows that these impressive results have successfully scaled, with substantial improvements in the proportion of students of color who complete transferable math requirements.

Los Medanos College serves a diverse population of students traditionally underrepresented in higher education. Many of our students come to LMC underprepared and require remediation in math and/or English, with students of color disproportionately placed into lower level courses. These efforts are costly to the student, the college, and the State. In addition, it is often ineffective: Statewide, only 31% of students in math remediation complete a college-level course in that discipline within 6 years; for English, that figure is 44%. CAP has provided the vision and the support for colleges to dramatically improve student outcomes with no additional add-on costs to the institution.

An "Award for Innovation" will acknowledge CAP's contribution to improving student outcomes across multiple colleges and to addressing equity gaps. It will also highlight accelerated remediation as a crucial cost-effective strategy for achieving equity goals, improving rates of completion of lower division transfer requirements, and decreasing time-to-transfer for community college students.

Thank you for your consideration of this highly-effective, transformative program.

Sincerely,



Bob Kratochvil, Ed.D.

President



December 12, 2014

Committee on Awards for Innovation in Higher Education
California Department of Finance
Education Systems Unit—Innovation Awards
915 L Street - 7th Floor
Sacramento, CA 95814

Dear Committee Members,

Please allow me to submit this letter of support for the California Acceleration Project's (CAP) application for the Department of Finance Award for Innovation in Higher Education. The California Acceleration Project supports Skyline College and 46 other community colleges to redesign, streamline, and accelerate remediation with the goal of improving completion of college level gatekeeper courses in math and English. Through the CAP professional development program, Skyline College faculty have developed and offered accelerated courses in both English and math, and they are enthusiastic about the results they're seeing.

Skyline College serves a diverse population of students traditionally underrepresented in higher education. More than 70 % of the students test into remedial levels of either math or English. This is an unfortunate impact of typical assessment processes that not only are not connected to the courses but have the effect of further marginalizing students by locking them into unreasonable sequences of remediation courses. While this is costly to the student, it is even more costly to the communities and society at large because there is a decreased likelihood that the students will actually complete the courses and consequently, their degrees and certificates. Statewide, only 31% of students in math remediation complete a college-level math course in 6 years and only 44% complete a college level English course in 6 years.

As an institution that has engaged in a comprehensive diversity framework that rejects most student deficit based assumptions that rationalize why "they are not successful", Skyline College has taken on the evidenced based approach to equity that answers the question, "What about our practices, processes, and policies negatively impact the ways in which student connect to, enter, transition through and complete their educational goals in our institution?" This fundamental question that served as an overall research question lead us to pilot the approach offered by the California Acceleration Project—and it

OFFICE OF THE PRESIDENT

has made a tremendous difference to our students and faculty. Indeed it is an integral component of our Student Equity Plan and student success strategy.

CAP's evaluation results show substantial improvements in student outcomes for underprepared students with less time spent in remediation and no additional add-on costs to the college. Of particular importance, equity gaps for African American students were eliminated in accelerated math pathways.

An Innovation Award will support CAP's ability to continue important work and acknowledge their contribution to improving student outcomes across multiple colleges. It will also highlight accelerated remediation as a crucial cost-effective strategy for achieving equity goals, improving rates of completion of lower division transfer requirements, and decreasing time-to-transfer for community college students.

As the President of Skyline College, I am enthusiastic about the potential for continuing our collaboration with the California Acceleration Project. We need the support and expertise in CAP to expand early pilots to reach more students. Remediation redesign at Skyline College is sustainable and has the potential for dramatic impact if the Math and English departments are supported to teach these new courses on a wider scale.

I hope you are able to recognize the significance of this work and the impact it can have on our success in educating students.

Respectfully submitted,



Dr. Regina Stanback Stroud
President, Skyline College

OFFICE OF THE PRESIDENT



December 12, 2014

From:

Dr. Rob Johnstone
Founder & President
National Center for Inquiry & Improvement

To:

Consideration Committee
Department of Finance Award for Innovation in Higher Education

Re: Support for the California Acceleration Project's Application

Selection Committee:

My name is Dr. Rob Johnstone, and I am honored to write a hearty letter of recommendation for the California Acceleration Project (CAP) for the Department of Finance Award for Innovation in Higher Education. CAP, under the tutelage of my colleagues Katie Hern and Myra Snell, has achieved notably higher levels of achievement of the only real outcome for developmental mathematics – successfully passing a transfer level course of appropriate rigor. At the heart of CAP's innovation is this improvement in outcomes – students' odds of completion are 4.5 times higher than a matched comparison group. Given that the program can and is in the process of being operated at scale, these results are incredibly worthy of recognition. In addition, as I will outline below, these increases in the completion rate are associated with significant increases in cost efficiency.

As far as the credentials to write such a recommendation, I am the Founder & President of the National Center for Inquiry & Improvement (www.inquiry2improvement.com), an organization that fuses the worlds of foundations, policy and practice, working with community colleges and regional four-year schools around the country on improving student outcomes. I formerly served as Senior Research Fellow and Vice President at The RP Group for California Community Colleges (where I worked with Katie & Myra), as well as a Dean and Vice President of Instruction at Foothill and Skyline Community Colleges in California.

Over the past ten years, I've had the opportunity to work on a large number of state and national improvement initiatives such as Completion by Design, the Aspen Prize for Community College Excellence, Achieving the Dream, Lumina's Guided Pathways to Success, Kresge's Pathways Initiatives, Lumina's Beyond Financial Aid, Carnegie's Statway / Quantway, and Edtrust's Access to Success. On these projects I have worked on the ground with over 100 colleges around the country in one form or another, and combined with a decade of experience as a Dean and VP in the California Community College system, I have a pretty good sense of what the field needs to meet the aggressive goals of fundamentally improving outcomes for our students. In addition, I've conducted cost efficiency and return-on-investment analyses on CAP and a

number of other projects in higher education, following having done this as a strategic consultant in industry with a wide range of Fortune 1000 companies.

This all brings us to the California Acceleration Project, a project about which I've known since its inception and also for which I developed a cost efficiency model in 2012-13. As noted above, CAP has significantly increased the transfer course pathway rate; with this increase comes a number of notable increases in cost efficiency. The model I created, which is an Excel spreadsheet can be customized on a number of levels, including:

- the number of students at a college or in a state system
- the relative ratios of students placed into various levels under the traditional pathway
- the average instructional cost per unit of both PT & FT faculty in the traditional and CAP sequences
- the ratio of courses taught in the sequence by PT & FT faculty in the traditional and CAP sequences
- the number of units in the traditional and CAP sequences
- average class size in the traditional and CAP sequences
- average number of attempts at each level of the traditional and CAP sequences
- cohort success rates at each level of the traditional and CAP sequences

Using these inputs of both the traditional and CAP pathways, the model calculates:

- overall entering cohort completion rate of the traditional pathway
- overall entering cohort completion rate of the CAP pathway
- the cost of the traditional pathway
- the cost of the CAP pathway
- the cost per completer of the traditional pathway
- the cost per completer of the CAP pathway
- percentage of the cost each pathway that is in the pre-transfer sequence
- an estimate of cost savings to the student due to a reduced semesters to degree estimate

As you can see from the instance of the model in which Katie & Myra have blended results from the seven initial cap colleges and estimated the effects of CAP at scale. Using current figures on the improvement in the CAP sequence and the cost inputs you can see in the spreadsheet, the key outcomes of the model are:

- a total cost reduction of the CAP pathway of 12% vs. the traditional pathway
- a 34% reduction in cost of remediation
- a cost per completer of \$2,470 for the traditional pathway and \$1,301 for the CAP pathway – a reduction of 47%
- a reduction in the cost of courses that are pre-transfer from 71% in the traditional sequence to 53% in the CAP sequence

Clearly, the cost efficiencies achieved by the California Acceleration Project are noteworthy – and are based in the incredible increases in the achievement and success of students under CAP, combined with a model that is scalable and sustainable.

In sum, you have in front of you the application of an incredibly important innovation that is worthy of serious consideration for the award. This project has moved the needle in such a significant way that it sits among the elite improvement projects in the community college space.

Feel free to contact me at rob@inquiry2improvement.com or by phone at [650-740-1796](tel:650-740-1796).

Sincerely...

Rob Johnstone

Dr. Rob Johnstone



High Challenge, High Support Classrooms for Underprepared Students

TOWARD A VISION OF **ACCELERATED**
CURRICULUM & PEDAGOGY



BY **KATIE HERN** | Director, California Acceleration Project | English instructor, Chabot College
with **MYRA SNELL** | Math lead, California Acceleration Project | Professor of Mathematics, Los Medanos College



Developmental education is under an uncomfortable microscope these days. President Obama has called for dramatic increases in completion of post-secondary credentials, and legislators and policy makers have zeroed in on remediation reform as essential to meeting this goal. Four national organizations have called for an overhaul of English and math remediation, including placing most students directly into credit-bearing college courses, tailoring math remediation to students' chosen pathways, eliminating multi-level remedial sequences, and offering co-requisite support and accelerated models for less prepared students.

THE MOVEMENT to reform remediation is spurred by three important trends in the national research on community colleges: 1) studies showing that that huge numbers of students disappear before making meaningful progress in college, and that the more layers of remedial coursework students must take, the lower their completion of college-level English and math; 2) studies questioning the accuracy of the standardized tests that sort students into different levels of remediation, and 3) studies showing significantly better outcomes among students enrolled in accelerated models of remediation.

While the research has clarified key problems in developmental education, and pointed toward promising directions for change, an important question is often missing from the conversation: What does instruction look like in an accelerated class? And how is it different from more traditional approaches to remediation?

LearningWorks commissioned the monograph "Toward a Vision of Accelerated Curriculum and Pedagogy" to address these important questions. Katie Hern and Myra Snell, leaders of the California Acceleration Project, draw upon their own classroom experience, and their work with community college faculty across the state, to articulate a set of core principles and practices for teaching accelerated English and math – in particular, how teachers can support students with widely varying backgrounds and skill levels to be successful in an accelerated environment.

Hern and Snell offer five core design principles for high-challenge, high-support accelerated classes:

- **Backward design from college-level courses**

This design principle addresses the misalignment between traditional remediation and college-level coursework. In English, backward design holds that a developmental course should look and feel like a good college English course, with more support and guidance. In math, it asks which math students need



for their chosen pathway, then aligns remediation to those specific college-level requirements – more extensive algebra for students heading toward calculus, accelerated pre-requisite or co-requisite support for students taking statistics or liberal arts math.

- **Relevant, thinking-oriented curriculum**

An alternative to remediation focused predominantly on correctness in written form or mathematical procedure, this kind of curriculum asks students to engage with issues that matter, wrestle with open-ended problems, and use resources from the class to reach and defend their own conclusions.

- **Just-in-time remediation**

An alternative to separating out and teaching discrete sub-skills in advance, this approach provides only the support students specifically need to grapple with challenging college-level tasks; includes individualized grammar guidance on students' own writing and as-needed review of the arithmetic or algebra required to answer intellectually engaging questions with data.

- **Low-stakes, collaborative practice**

In-class activities are designed to give students practice with the most high-priority skills and content needed for later, graded assessments.

- **Intentional support for students' affective needs**

Pedagogical practices are employed to reduce students'

fear, increase their willingness to engage with challenging tasks, and make them less likely to sabotage their own success in a class.

With extended illustrations of each principle, "Toward a Vision of Accelerated Curriculum and Pedagogy" serves as an essential resource for the larger effort to reform remediation, particularly for faculty needing support to move away from traditional, decelerated models of instruction.

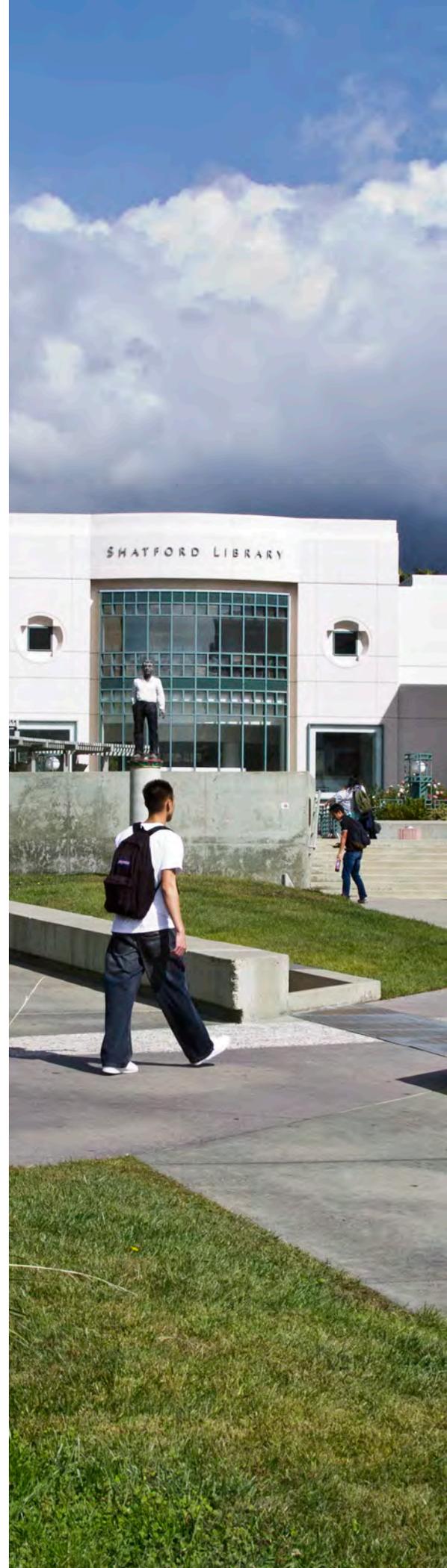
The California Acceleration Project is funded by California Community Colleges Chancellor's Office, through a professional development grant to 3CSN, the California Community Colleges' Success Network. Additional financial support has been provided through the Walter S. Johnson Foundation, LearningWorks, and the "Scaling Innovation" project of the Community College Research Center, funded by the William and Flora Hewlett Foundation.





LearningWorks was founded by the Career Ladders Project for California Community Colleges, the Research and Planning Group for California Community Colleges, and the California Community Colleges Success Network to facilitate, disseminate and fund practitioner-informed recommendations for changes at the community college system and classroom levels, infusing these strategies with statewide and national insights. LearningWorks seeks to strengthen the relationships that offer the greatest potential for accelerating action, including those between policy makers and practitioners, among overlapping initiatives, and across the 112 colleges. LearningWorks is supported by the William and Flora Hewlett Foundation and the Walter S. Johnson Foundation.

ADDRESS 678 13th Street, Suite 103 | Oakland, CA 94612
WEB www.LearningWorksCA.org



Curricular Redesign and Gatekeeper Completion: A Multi-College Evaluation of the California Acceleration Project

Summary

April 2014

Authors:

Craig Hayward, Ph.D.

Terrence Willett, M.S.

Senior Researchers, RP Group

Prepared for:

Deborah Harrington

Executive Director, 3CSN

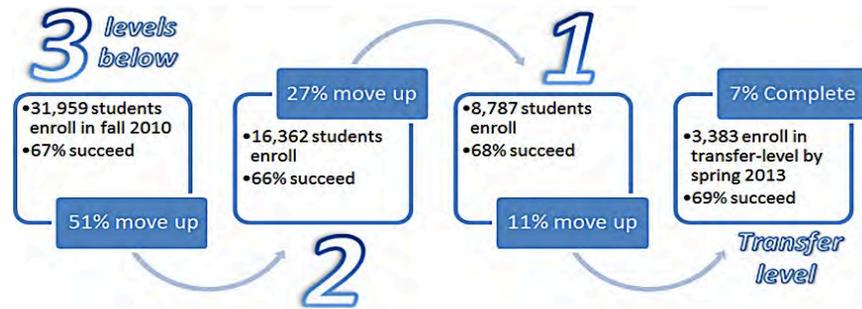
Katie Hern, Director

California Acceleration Project

Executive Summary

The Problem

Large numbers of students are being placed into long remedial or basic skills sequences from which few emerge. Across the California Community College system, only 7% of students beginning at three levels below transfer-level successfully complete transferable math within three years. The comparable number for English is only 19%.



Statewide progression of students in math from three levels below transfer to transfer-level math from fall 2010 through spring 2013.

The Intervention

The California Acceleration Project (CAP), an initiative of the California Community Colleges' Success Network (3CSN), provided training in the development of accelerated English and math pathways. While there was variation in the specific models implemented, all participating colleges reduced students' time in remediation by at least a semester; made no changes to the transferable college-level course (only remediation was redesigned); and aligned remediation with the college-level requirements for college composition and statistics (science specific math such as pre-calculus was not included). Most also employed a set of CAP instructional design principles for creating "high-challenge, high-support classrooms."

The Study

The RP Group tested the hypothesis that *students in accelerated pathways complete the transfer-level gatekeeper course at a rate higher than comparable students who participate in the traditional sequence*. This hypothesis was examined by contrasting the completion of the transfer-level gatekeeper course by accelerated students relative to comparable students who were enrolled in the traditional English and math basic skills sequences in the 2011-2012 academic year, CAP's pilot year. Students were followed through spring 2013.

Main Findings

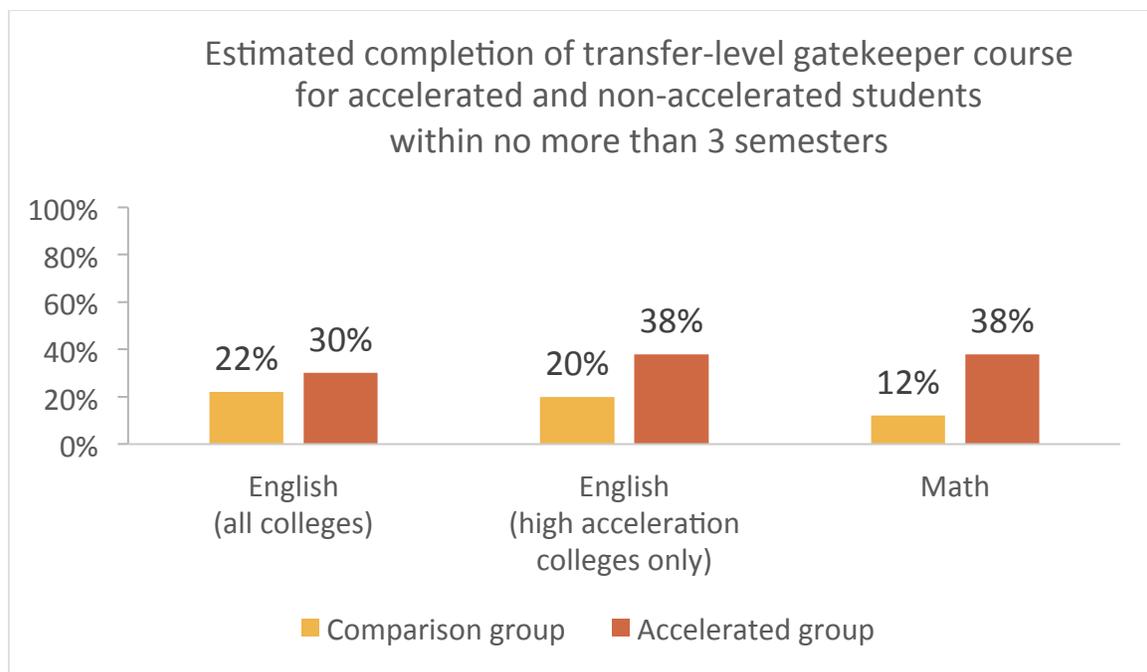
Acceleration effects were large and robust: This study found that accelerated pathways had an overall effect of increasing the odds of completing transfer-level gatekeeper courses for students at all levels of the developmental sequence. After controlling for an array of potentially confounding demographic and academic variables, students' odds of completing a transferable college-level course were 1.5 times greater in accelerated English models overall and 2.3 times greater in high-acceleration models. Students' odds of completing a transferable math course were 4.5 times greater in accelerated pathways than for students in traditional remediation. While not all of the accelerated pathways for English showed significant positive effects, no pathways showed significant negative effects.

Acceleration worked for students of all backgrounds: A diverse range of students in the analysis showed higher outcomes in accelerated pathways regardless of demographics such as ethnicity, gender, financial need, disability status, and prior English as a second language course taking.

Acceleration worked for students at all placement levels: Accelerated pathways were associated with increased odds of sequence completion for students placed at all levels of the basic skills sequence in both math and in English.

Implementation Mattered: Variation in how the 16 participating colleges realized acceleration was an important factor. English acceleration pathways were parsed into low-acceleration and high-acceleration pathways. Low-acceleration pathways imposed additional coursework and/or strong institutional filtering processes and tended to show little or no acceleration effect.

Results



Overall, the data suggested that English and math acceleration had a strong and positive association with completion of the transfer-level gatekeeper course. Students in accelerated pathways in the colleges studied completed transfer-level coursework at higher rates than did students in traditional developmental pathways. The acceleration effect was found even after controlling for a host of potentially confounding variables, including GPA (in non-related courses), place in the sequence, gender, and ethnicity. The estimated unique effect of acceleration is shown in the figure above (using marginal means from regressions). The completion rate in an accelerated pathway for Math was 38%, while the comparison group in the traditional sequence had an estimated 12% sequence completion rate. While English acceleration had a large and significant effect (30% accelerated completion rate vs. 22% for the comparison group), it was clear that the observed effect was largely being driven by the high-acceleration pathways, which boast an estimated completion similar to that seen in the accelerated math pathways and suggests the importance of implementation for achieving successful outcomes.

About the Study

The study tracked the progress of students from colleges that participated in the first year of the college's CAP implementation through spring 2013 for one to one and a half years after the intervention semester. The evaluation included 16 colleges and 48,450 students: 2,489 accelerated students and 45,961 comparison students. Comparison student data was drawn from students who had enrollments in developmental math and/or English in the same term as the accelerated students.

Data for this evaluation came primarily from the Chancellor's office (COMIS data) combined with assessment/placement data sourced directly from each participating college. A lead faculty member or researcher at each CAP college also completed an implementation survey that provided information on the specific ways in which acceleration was realized at each site. The full technical report is available at www.rpgroup.org/cap.

Stakeholders

CAP (<http://cap.3csn.org/>) is part of the California Community Colleges Success Network (3CSN). The project promotes and supports a community of practice centered on accelerated pathways for English as well as math. CAP provides training, advice, and support to faculty who are interested in implementing accelerated pathways at their local community college. This study was jointly funded by California Community College Success Network (3CSN) and a private grant from the Walter S. Johnson Foundation.

The RP Group Staff Biographies



Craig Hayward chayward@rpgroup.org

Dr. Hayward is embedded in the daily work of improving institutional effectiveness and student success at Irvine Valley College as the Director of Research, Planning and Accreditation. He received his Bachelor's in Journalism from Boston University and his Ph.D. in Human Development from the University of California, Irvine. He has taught statistics, research methods, and psychology to graduate and undergraduate students. In his capacity as a Senior Researcher for the RP Group, he has been involved in a number of prominent statewide projects including the Transfer Velocity Project, the Student Success Scorecard, and the Basic Skills Cohort Progress Tracker.



Terrence Willett twillett@rpgroup.org

Mr. Willett is Director of Planning, Research, and Knowledge Systems at Cabrillo College and a Senior Researcher with the RP Group. He received a B.A. in Psychology UC Santa Cruz and an M.S. in Environmental Studies from San José State University. He was the Director of Research for Cal-PASS and HI-PASS (linked K-12 and high education data systems for California and Hawai'i, respectively) and Director of Research for Gavilan College where he also taught Field Ecology. He is experienced with large relational data bases, predictive modeling using traditional and machine learning/data mining techniques, and geographic information systems (GIS) analyses.



Current Grantees

As of August 2014, CEPF has funded four cohorts of grantees:

[Cohort Four Grantees](#) [Cohort Three Grantees](#) [Cohort Two Grantees](#) [Cohort One Grantees](#)

CEPF Cohort Four Grantees

In August 2014, CEPF made its fourth round of grant awards. The grants support 10 organizations with the potential to impact education policy reform and policy implementation to promote Deeper Learning in California. A total of \$3.65 million was awarded.

CEPF's Fourth Cohort of Grantees Includes:

- [California Acceleration Project](#)
- [California Collaborative on District Reform](#)
- [Campaign for College Opportunity](#)
- [Council for a Strong America](#)
- [Educational Policy Improvement Center](#)
- [Educators for Excellence](#)
- [EdVoice Institute](#)
- [Los Angeles Area Chamber of Commerce Foundation](#)
- [Policy Analysis for California Education \(PACE\)](#)
- [Stanford Center for Opportunity Policy in Education \(SCOPE\)](#)

California Acceleration Project (CAP):

The CAP supports the state's 112 community colleges to redesign and accelerate English and math remediation to increase student completion of college courses in those disciplines. Completion of college level math and English is a fundamental momentum point to transfer and degree attainment, and the first hurdle faced by the 70% of California Community College students deemed "underprepared" for college. Relying on research and experimental design, CAP involves grassroots, network-based organizing and professional development to change the structure, curricula, and pedagogy of remediation. CAP collaborates with faculty and partner organizations to reach wider audiences and create an echo chamber for change.

California Collaborative on District Reform:

The California Collaborative on District Reform convenes district leaders and other practitioners, state policymakers, researchers, and funders in ongoing dialogue, collective problem solving, and action, to improve instruction and student learning across California, especially for the state's most underserved children. An initiative of the American Institutes for Research (AIR), the Collaborative brings its practitioners and other members into the state and local policy arenas to identify problems of practice and policy, enact solutions to those problems, and implement the solutions effectively. The Collaborative's 38 members include superintendents from nine of the state's districts (Fresno, Garden Grove, Long Beach, Los Angeles, Oakland, Sacramento, San Francisco, San Jose, and Sanger); key state policy makers (including the current president of the State Board of Education and representatives from the California Department of Education), prominent researchers with expertise in both district- and state-level policy and reform, and support providers, advocates and foundation leaders working to improve education opportunities and outcomes in the state. The Collaborative's two main goals have remained consistent since its inception nine years ago: building capacity to improve policy and practice; and influencing state and local action.

Campaign for College Opportunity:

Founded in 2003 by an alliance of prominent organizations including the California Business Roundtable, the Mexican American Legal Defense and Educational Fund, and the Community College League of California, the Campaign for College Opportunity is a nonprofit organization committed to ensuring that the next generation of California students has the chance to attend college and succeed in achieving some level of postsecondary education. The Campaign was founded on the belief that independent pressure from a broad

coalition of stakeholders and widespread media attention on policymakers and our higher education systems is necessary to press for successful policy solutions that meet workforce needs and ensure college opportunity for the growing diverse young adult population in our state. The Campaign focuses on improving student access to and success in California's public higher education institutions by raising public awareness, building a strong and diverse coalition of supporters, and engaging in public policy and systems change.

Council for a Strong America:

The Council for a Strong America is the parent organization of three sibling organizations, all working toward the common goal of education reform and increased investments in children and families in California and at the national level. The Council's "unexpected messengers" for education reform – California's law enforcement leaders, business leaders, and retired admirals and generals – bring new voices to the conversation, helping stakeholders and the public understand the changes that are critical for the state's young people to succeed in college, career, and civic life. *Fight Crime: Invest in Kids* is led by more than 400 California police chiefs, sheriffs, district attorneys, and crime survivors who know high quality education is the best way to help young people succeed in life and improve public safety. *ReadyNation* (formerly *America's Edge*) mobilizes more than 100 California business leaders to advocate for education reform for a skilled 21st century workforce, vibrant economy, and employment growth. *Mission: Readiness'* retired admirals and generals argue that education reform increases national security by preparing children to succeed in life – whatever career path they choose.

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Excerpted from <http://rockpa.org/about-us/cepf---current-grantees-aug2014#CalCollab>

California Acceleration Project Estimate of Direct Savings Model

Math Pathway Comparison for Students in non-Math intensive majors

Table 1 Model Inputs

Input

Number of incoming students taking math who plan to transfer with a non-math intensive major

% who plan to transfer with a non-math intensive major

Traditional path:% of entering students starting 3 levels below transferable Math

Traditional path:% of entering students starting 2 levels below

Traditional path:% of entering students starting 1 level below

Traditional path:% of entering students placing into transfer level

Traditional path: Units for course 3-levels below

Traditional path: Units for course 2-levels below

Traditional path: Units for course 1-levels below

Traditional path: Units for transferable course

Traditional path: Average number of attempts per student 3 levels below

Traditional path: Average number of attempts per student 2 levels below

Traditional path: Average number of attempts per student 1 level below

Traditional path: Average number of attempts per student placing into transfer level

CAP Redesign: % of entering students placing into remediation

CAP Redesign: % of entering students placing into transferable course + support

CAP Redesign: % of entering students placing into transfer level

CAP Redesign: Units for remedial course

CAP Redesign: Units for remedial support

CAP Redesign: Units for transferable course

CAP Redesign: Average number of attempts per student placed into remediation

CAP Redesign: Average number of attempts per student in transfer course + support

CAP Redesign: Average number of attempts per student in transfer level

Cost per unit in dollars*for the state

Cost per unit in dollars for students

Table 2 Model Inputs: Cohort Tracking (% of students starting at a given level)

Cohort

Traditional path: starting placement 3 levels below

Traditional path: starting placement 2 levels below

Traditional path: starting placement 1 level below

Traditional path: starting placement at transfer level

CAP Redesign: starting in remediation

CAP Redesign: transfer level + support

CAP Redesign: transfer level

*A=access, P=pass C or better

Table 3: Outputs

Traditional Path: Estimated direct costs starting 3 levels below through transfer level

Traditional Path: Estimated direct costs starting 2 levels below through transfer level

Traditional Path: Estimated direct costs starting 1 level below through transfer level

Traditional Path: Estimated direct costs starting at transfer level

Traditional Path: Total estimated direct costs

CAP Redesign: Estimated direct costs for remediation through transfer level

CAP Redesign: Estimated direct costs for transfer level plus support

CAP Redesign: Estimated direct costs starting at transfer level

CAP Redesign: Total estimated direct costs

Difference in total direct cost (Traditional minus CAP)

Percent improvement in total direct cost

Traditional Path: Cost of remediation starting 3 levels below

Traditional Path: Cost of remediation starting 2 levels below

Traditional Path: Cost of remediation starting 1 level below

Traditional Path: Total cost of remediation

CAP Redesign: Cost of remedial course

CAP Redesign: Cost of support course

CAP Redesign: Total cost of remediation

Difference in cost of remediation

Percent improvement in cost of remediation

Traditional Path: Direct cost per completer

CAP Redesign: Direct cost per completer

Difference in direct cost per completer

Value

1,000	
70%	
31%	Basic Skills Cohort Tracker Statewide FA2009-SP2012
28%	Basic Skills Cohort Tracker Statewide FA2009-SP2012
26%	Basic Skills Cohort Tracker Statewide FA2009-SP2012
15%	http://californiacommunitycolleges.cccco.edu/Portals/0/reportsTB/f
4	
4	
4	
4	
1.13	Basic Skills Cohort Tracker blended data 8 CAP colleges
1.32	Basic Skills Cohort Tracker blended data 8 CAP colleges
1.35	Basic Skills Cohort Tracker blended data 8 CAP colleges
1.66	
30%	one semester of remediation
30%	Scott Clayton 40-53% of those in remediation could earn a C in trans
40%	15% current + Scott Clayton 20-33% of those in remediation could ea
5	
2	
4	
1.1	
1.5	
1.66	
\$230	*per CCCCO, rough estimate of cost of instruction is nonresident tuit
\$46.00	

AL3*	PL3	AL2	PL2	AL1	PL1
100%	45%	41%	26%	22%	15%
		100%	65%	47%	33%
				100%	73%
				100%	75%

Value

\$603,939.52
\$593,278.56
\$509,543.84
\$229,080
\$1,935,841.92
\$700,212.00
\$621,000
\$610,880
\$1,932,092.00
\$3,749.92
0.19

\$561,330.64
\$503,479.20
\$322,920.00
\$1,387,729.84
\$379,500.00
\$414,000.00
\$793,500.00
\$594,229.84
43

\$7,462.77
\$3,167.36
\$4,295.40

[REPORT_BASICSKILLS_FINAL_110112.pdf \(85% place into remediation in Math\)](#)

transferable course ~53% - 20% ~30%
earn a B in transferable course ~15% + 25%

remediation rate, meaning the state cost per unit is the non-resident cost per unit minus student cost per

AT	PT	
9%	6%	Basic Skills Cohort Tracker blended data 8 CAP colleges
21%	16%	Basic Skills Cohort Tracker blended data 8 CAP colleges
47%	35%	Basic Skills Cohort Tracker blended data 8 CAP colleges
100%	70%	
70%	40%	RPGGroup CAP data (estimate)
100%	70%	
100%	70%	

r unit



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IMPROVEMENT

9/23/2013

A Cost Efficient Model Development for the California Acceleration Project





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nia



California Acceleration Project Cost Efficiency Model Blended Model for Seven Initial CAP Colleges, 09/23/13

Model Input Table 1

*See Instructions Worksheet for information on each input

Input	Value
1a. Number of students in all math pathways at scale	1,428
1b. Percentage of Students at Scale Attempting to Pass a Transfer-Level Course, Non-Stem Majors	70%
1c. Number of students at scale in non-STEM CAP Pathway	1,000
2a. % of Entering Students Starting at Pre-Algebra	30%
2b. % of Entering Students Starting at Elementary Algebra	32%
2c. % of Entering Students Starting at Intermediate Algebra	28%
2d. % of Entering Students Starting at Transfer Math	10%
3a. Average Instructional Cost per Unit - Full-Time Faculty	\$3,000
3b. Average Instructional Cost per Unit - Part-Time Faculty	\$1,600
4a. % of pre-transfer mathematics courses taught by FT Faculty, Traditional Pathway	33%
4b. % of pre-transfer mathematics courses taught by PT Faculty, Traditional Pathway	67%
4c. % of transfer mathematics courses taught by FT Faculty, Traditional Pathway	60%
4d. % of transfer mathematics courses taught by PT Faculty, Traditional Pathway	40%
4e. % of CAP mathematics courses taught by FT Faculty at scale	50%
4f. % of CAP mathematics courses taught by PT Faculty at scale	50%
5a. Units for Pre-Algebra course in Traditional Sequence	4
5b. Units for Elementary Algebra course in Traditional Sequence	4
5c. Units for Intermediate Algebra course in Traditional Sequence	4

2a.-2d. Blended da

5d. Units for Transfer-level course in Traditional Sequence	4
5e. Units for Pre-Statistics course in CAP Sequence	4
5f. Units for Statistics course in CAP Sequence	4
6a. Average Class Size, Pre-Transfer Courses, Traditional Pathway	30
6b. Average Class Size, Transfer Courses, Traditional Pathway	30
6c. Average Class Size, CAP Pathway	30
7a. Average # of attempts per Traditional Pre-Algebra Student	1.13
7b. Average # of attempts per Traditional Elementary Alg. Student	1.32
7c. Average # of attempts per Traditional Intermediate Alg. Student	1.35
7d. Average # of attempts per Traditional Transfer Math Student	1.66
7e. Average # of attempts per CAP Intermediate Alg. Student	1.10
7f. Average # of attempts per CAP Statistics Student	1.20

7a.-7d. Blended da

Model Input Table 2- Cohort Tracking %s

*See Instructions Worksheet for information on each input

Cohort	AP	PP	AE
9a. Cohort Success % through Transfer Level, Traditional Starting at Pre-Algebra*	100%	69%	55%
9b. Cohort Success % through Transfer Level, Traditional Starting at Elementary Algebra*			100%
9c. Cohort Success % through Transfer Level, Traditional Starting at Intermediate Algebra*			
9d. Cohort Success % through Transfer Level, Traditional Starting at Transfer-Level*			
9e. Cohort Success % through Transfer Level, CAP Starting at One Level Below Course*			
9f. Cohort Success % through Transfer Level, CAP Starting at Transfer-Level*			

ata 7 CAP colleges

ata 7 CAP colleges

PE	AI	PI	AT	PT	
38%	28%	20%	11%	8%	41-43 Blended data 7 CAP colleges
64%	49%	35%	23%	18%	
	100%	72%	49%	36%	
			100%	80%	
	100%	75%	70%	40%	RPGROUP CAP data
			100%	80%	

California Acceleration Project Cost Efficiency Model Outcomes

Table 1. Traditional Pathway

Item	Value
1. Cost of Traditional Pathway Starting at Pre-Algebra	\$202,001
2. Cost of Traditional Pathway Starting at Elementary Algebra	\$213,992
3. Cost of Traditional Pathway Starting at Intermediate Algebra	\$177,949
4. Cost of Traditional Pathway Starting at Transfer-Level	\$53,984
5. Total Cost of Traditional Pathway, Including Transfer Math Course	\$647,926
6. Entering Cohort Size at Scale	1,000
7. Number of entering cohort completing transferrable course, Traditional Pathway	262
8. Overall entering cohort completion rate of transferrable course, Traditional pathway	26%
9. Cost / completer, Traditional Pathway	\$2,470
10. Cost of Pre-transfer Sequence in Traditional Pathway	\$462,330
11. Cost of Transfer Math Courses in Traditional Pathway	\$185,596
12. Percentage of Cost in Pre-Transfer Courses, Traditional Pathway	71%
13. Percentage of Cost in Transfer Math Courses, Traditional Pathway	29%

Table 2. CAP Pathway

Item	Value
1. Cost of CAP Pathway Starting at All Pre-Transfer Levels	\$535,226
2. Cost of CAP Pathway Starting at Transfer-Level (not considering repeats)	\$36,785
3. Total cost of CAP Pathway, Including Transfer Course	\$572,011

4. Entering Cohort Size at Scale (from above)	1,000
5. Number of entering cohort completing transferrable course, CAP Pathway	440
6. Overall entering cohort completion rate of transferrable course, CAP pathway	44%
7. Cost / completer, CAP Pathway	\$1,301
8. Cost of Pre-transfer Sequence in CAP Pathway	\$303,479
9. Cost of Transfer Math Courses in CAP Pathway	\$268,533
10. Percentage of Cost in Pre-Transfer Courses, Traditional Pathway	53%
11. Percentage of Cost in Transfer Math Courses, Traditional Pathway	47%

Table 3. Summary of Key Findings

Outcome	Traditional
1. Blended Entering Cohort Completion Rate of Transfer-Level Math Course	26%
2. Total cost of Pathway, Including Transfer Course	\$647,926
3. Cost of Pre-Transfer Math Courses in Pathway	\$462,330
4. Cost per Completer of Transfer-Level Math Course	\$2,470
5. Percentage of Cost in Pre-Transfer Math Courses	71%

Table 4. Savings to Students

Note: Savings to Students assumes that CAP saves students full semesters by accelerating them through dev ed more quickly.

Item	Value
1. Semesters to Degree for Traditional Students	9.0
2. Semesters to Degree for CAP Students	7.0
3. Semesters Saved for CAP Students	2.0

4. California CC Per Semester Tuition	\$552
5. Tuition Savings for CAP Students	\$1,104
6. Books Cost per Semester	\$500
7. Student Books Savings under CAP	\$1,000
8. Total Savings to CAP Graduates at CC	\$2,104
9. Wages for Last Year CC Students (from CCCCO Wage Tracker)	\$18,400
10. Wages for CC Students after Cert / Degree (from CCCCO Wage Tracker)	\$43,000
11. Net Wage Gain for Students Graduating Early	\$24,600

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CAP	Improvement
44%	68%
\$572,011	12%
\$303,479	34%
\$1,301	47%
53%	26%

CAP Year in Review: Highlights from 3CSN's Annual Report to the Chancellor's Office.

<http://cap.3csn.org/2014/08/05/cap-year-in-review-2013-14/>

by **Katie** on August 5, 2014 in **Disciplines, Evaluation, Math, Networking, Pedagogy, Professional Learning, Program Development, Reading, Reporting, Research, Writing**

The California Acceleration Project (CAP) supports community colleges to redesign English and math remediation to help more students complete college-level English and math requirements. Since 2010, all of California's 112 community colleges have participated in our outreach efforts, and 47 colleges are offering redesigned English and math pathways through our extended professional development program. In 2013-14, approximately 10,000 California community college students enrolled in accelerated English and math pathways at CAP pilot colleges.

This spring, the Research and Planning Group for California Community Colleges (RP Group) released a **study** of student outcomes for the first cohort of 16 CAP colleges. This quasi-experimental study controlled for preexisting student characteristics and found "large and robust" gains in student completion of transferable courses:

"CAP pushed us to strive for a goal that we originally thought was insane. Our accelerated course would not be a reality if not for CAP. My teaching philosophy has shifted for all of my classes. I am inspired. We have created opportunity for student success and I can see that on a daily basis."

Melissa Long, English, Porterville College

- In effective models of accelerated English remediation, students' odds of completing a college-level course were 2.3 times greater than in traditional remediation;
- In accelerated math pathways, their odds of completing college-level math (Statistics) were 4.5 times greater.

In examining various student subgroups, the researchers found that all students benefitted from effective accelerated pathways – including all racial/ethnic groups, all placement levels, low-income students, ESL students, students with disabilities, students with low GPAs, and students who hadn't graduated from high school.

According to the researchers, "This evaluation found strong evidence that accelerated curriculum can be developed at multiple college sites in a short period of time with good results, particularly for those accelerated pathways that articulate directly with transfer-level gatekeeper courses."

CAP Community of Practice

Teaching an accelerated course often looks quite different from teaching in a more traditional, longer remedial sequence. Given this, faculty need support as they begin teaching in these models, such as classroom-tested materials, pedagogical practices they can adapt, and other teachers they can talk with. The Community of Practice in Acceleration is a year-long professional development program for colleges offering at least two sections of an accelerated English, math, or ESL course.

We are now in our fourth cycle of the CAP Community of Practice. Since we began offering the program, more than 260 teachers from 47 colleges have participated, with several offering accelerated courses in more than one discipline.

This year's group features the largest number of faculty to date – 106 instructors from 22 colleges.

In three years, student enrollment in accelerated courses at CAP colleges more than tripled, from 3,200 in 2011-12 to over 10,000 in 2013-14.

At many colleges, faculty trained in earlier years of CAP are now leading local professional development programs to support their colleagues to teach in redesigned accelerated courses.

Outreach in California

CAP workshops and publications demonstrate that high attrition rates are structurally guaranteed in multi-level basic skills sequences, and that even low-scoring students are better served by shorter, accelerated options. Participants are introduced to an array of evidence-based approaches for increasing student completion of

34 Colleges Offering Accelerated Reading/Writing & ESL

Allan Hancock College	LA Valley College
Butte College	Laney College (ESL)
Cerritos College	Lassen College
Chabot College	Los Medanos College
CCSF	Moreno Valley College
College of Marin	Mt San Jacinto College
College of the Canyons	Ohlone College
College of the Redwoods	Palomar College (ESL)
Cuyamaca College (Eng & ESL)	Pasadena City College
Feather River College	Porterville College
El Camino College – Compton	San Diego Mesa College
Fullerton College	Santa Monica College
Gavilan College	Santa Rosa College
Imperial Valley College	Southwestern College
Irvine Valley College	Skyline College
Lake Tahoe College	West Los Angeles College
LA Trade Tech	Yuba College

23 Colleges Offering Accelerated Math Pathways

Berkeley City College	LA Mission College
Cañada College	Los Medanos College
Chabot College	Moreno Valley College
City College of San Francisco	Palomar College
College of Alameda	Pasadena City College
College of the Canyons	Riverside City College
College of the Redwoods	San Diego City College
Contra Costa College	San Diego Miramar College
Cuesta College	Shasta College
Cuyamaca College	Skyline College
Diablo Valley College	West Valley College
LA Harbor College	

transferable English and math requirements, including placement policy changes, compressed courses, and redesigned pathways.

CAP workshops are rated highly by participants. At the spring 2014 regional workshop at West Los Angeles College, 94% of evaluations rated the event “Excellent” or “Good.” At the spring 2014 workshop at Chabot College, 100% of evaluations rated the event “Excellent” or “Good.”

CAP leaders gave an average of 2 presentations per month in California during the 2013-14 academic year, including:

- The Strengthening Student Success Conference
- USC Center for Urban Education: The Institute for Equity, Effectiveness, and Excellence at Hispanic-Serving Institutions
- One-Day Acceleration Workshops in the Bay Area, Los Angeles, and Central Valley regions
- Three events for community college trustees and presidents hosted by the Community College League of California
- CMC³ Math Conference
- Two briefings for policy makers in Sacramento
- American Association of Hispanics in Higher Education, Student Success Institute
- Statewide meeting of articulation officers for community colleges, UC, and CSU
- Math remediation summit hosted by 20 Million Minds Foundation

“Why isn’t accelerated remediation offered at all California’s community colleges? Why are most students still stuck in the traditional system and dropping out at high rates? The state needs to provide resources for colleges to retool remedial curricula, set meaningful goals for increasing completion among underprepared students, and hold campuses accountable for meeting those goals. We need to move beyond pilot projects and ensure that effective, accelerated remediation is available to all students, not just the lucky few.”

Gary K. Hart
Former California Senator and
Secretary of Education
Op-Ed, *Sacramento Bee*

National Outreach

The work of the California Acceleration Project has been spotlighted by several national organizations focused on increasing college completion, including Complete College America, the Education Commission of the States, Achieving the Dream, and the Community College Research Center. Through ongoing partnerships with these organizations, CAP leaders have addressed education and policy leaders from more than 40 states to date. They have also led statewide remediation reform workshops in 14 states. This year’s national outreach included:

- Washington DC Policy Briefing: **“Transforming Remediation to Improve Post-Secondary Attainment”**
- National Webinar: **“Transforming Remediation: Understanding the Research,**

Policy, and Practice”

- National Webinar hosted by Education First
- Achieving the Dream Annual Conference
- A Convening of 10 States: Countdown to 2015 – Developmental Strategies to Address Readiness in the Common Core Era
- American Association of Community Colleges: CAP Co-Founder Myra Snell honored as one of four finalists for the national faculty innovation award
- 6th Annual National Conference on Acceleration in Developmental Education
- Convenings of community colleges in Minnesota, Florida, Washington, Colorado, Oregon, West Virginia, and Pennsylvania

Research and Publications

In 2013-14, a number of publications and research studies focused on the California Acceleration Project and its participating colleges, including

- A third-party **evaluation of 16 CAP pilot colleges** by the Research and Planning Group for California Community Colleges
- A third-party **evaluation of Chabot College’s long-standing accelerated English course** by the Community College Research Center, Columbia University
- A **Sacramento Bee Op-Ed** piece by former California Senator and Secretary of Education calling for state investment in accelerated English and math
- A **syndicated news article** about CAP Co-Founder Myra Snell’s nomination as one of four finalists for the national Faculty Innovation Award offered by the American Association of Community Colleges
- A **monograph** by CAP co-founders Hern and Snell that articulates a set of core instructional principles and practices for redesigning remediation in English and Math, and illustrates how faculty can support students with widely varying backgrounds and skill levels to be successful in an accelerated environment
- A **policy brief** about the growing national movement to prioritize statistics and quantitative reasoning and rethink the traditional one-size-fits-all, algebra-based approach to math remediation
- Articles featuring CAP in **Inside Higher Education** and **Diverse Issues in Higher Education**

A recent study by the Community College Research Center examined ten years of data from the accelerated English course at Chabot College, using two kinds of statistical modeling to control for pre-existing differences between accelerated and non-accelerated students. It found that, after five years, accelerated students were 17 to 22 percentage points more likely to have completed college-level English, had earned approximately 4 more college-level credits, were 7 to 10 percentage points more likely to have transferred (or to be ‘transfer-ready’), and were 4 to 6 percentage points more likely to have graduated.

Edgecombe, Jaggars, Xu, & Barragan

“I am a better teacher for having taken part in CAP.... I've been given permission to let the students be in control much more in the classroom, and it's really expanded my relationship with students and the confidence students have in themselves. Participation in CAP is leading to higher outcomes because it is clear many of the students in our year-long learning community will leap to college-level English, thereby skipping an entire year of remedial courses.”

**Lawrence Lawson, ESL
Palomar College**

Baseline

Math	Transfer level	Success rate	Trad remediation	Completion rate	Accel remediation
BCC	0.32	0.76	0.61	0.32	0.07
COC	0.23	0.78	0.66	0.4	0.11
LMC	0.19	0.8	0.77	0.27	0.04
Skyline	0.23	0.7	0.73	0.34	0.04
	0.23		0.695		0.055
English					
COC	0.23	0.86	0.64	0.53	0.13
IVC	0.17	0.86	0.59	0.31	0.24
LMC	0.19	0.85	0.78	0.4	0.03
Skyline	0.23	0.82	0.47	0.49	0.3
	0.21		0.615		0.185

2015-2016

Math	Transfer level	Success rate	Trad remediation	Completion rate	Accel remediation
BCC	0.32	0.76	0.544	0.32	0.136
COC	0.23	0.78	0.616	0.4	0.154
LMC	0.19	0.8	0.648	0.27	0.162
Skyline	0.23	0.7	0.616	0.34	0.154
	0.23		0.616		0.154
English					
COC	0.23	0.86	0.616	0.53	0.154
IVC	0.17	0.86	0.59	0.31	0.24
LMC	0.19	0.85	0.648	0.4	0.162
Skyline	0.23	0.82	0.47	0.49	0.3
	0.21		0.603		0.201

2016-2017

Math	Transfer level	Success rate	Trad remediation	Completion rate	Accel remediation
BCC	0.4	0.76	0.45	0.32	0.15
COC	0.4	0.78	0.45	0.4	0.15
LMC	0.4	0.8	0.45	0.27	0.15
Skyline	0.4	0.7	0.45	0.34	0.15
English					
COC	0.5	0.86	0.3	0.53	0.2
IVC	0.5	0.86	0.26	0.31	0.24
LMC	0.5	0.85	0.3	0.4	0.2
Skyline	0.5	0.82	0.2	0.49	0.3

2017-2018

Math	Transfer level	Success rate	Trad remediation	Completion rate	Accel remediation
BCC	0.4	0.76	0.35	0.32	0.15
COC	0.4	0.78	0.35	0.4	0.15
LMC	0.4	0.8	0.35	0.27	0.15
Skyline	0.4	0.7	0.35	0.34	0.15

English

COC	0.5	0.86	0.2	0.53	0.2
IVC	0.5	0.86	0.16	0.31	0.24
LMC	0.5	0.85	0.2	0.4	0.2
Skyline	0.5	0.82	0.1	0.49	0.3

2018-2019

Math	Transfer level	Success rate	Trad remediation	Completion rate	Accel remediation
BCC	0.4	0.76	0.25	0.32	0.15
COC	0.4	0.78	0.25	0.4	0.15
LMC	0.4	0.8	0.25	0.27	0.15
Skyline	0.4	0.7	0.25	0.34	0.15

English

COC	0.5	0.86	0.1	0.53	0.2
IVC	0.5	0.86	0.06	0.31	0.24
LMC	0.5	0.85	0.1	0.4	0.2
Skyline	0.5	0.82	0	0.49	0.3

Completion rate	Co-requisite	Success rate	Overall completion	Achievement Gap
0.55	0	0	0.48	2.2
0.46	0	0	0.49	3
0.65	0	0	0.39	1.7
0.46	0	0	0.43	1.5
			0.455	
0.61	0	0	0.62	1.6
0.67	0	0	0.49	1.4
0.53	0	0	0.49	1.4
0.53	0	0	0.58	1.2
			0.535	

Completion rate	Co-requisite	Success rate	Overall completion	Achievement Gap
0.55	0	0	0.49	2.2
0.46	0	0	0.5	2.9
0.65	0	0	0.43	1.7
0.46	0	0	0.44	1.5
			0.465	
0.61	0	0	0.62	1.6
0.67	0	0	0.49	1.4
0.53	0	0	0.51	1.4
0.53	0	0	0.58	1.2
			0.545	

Completion rate	Co-requisite	Success rate	Overall completion	Achievement Gap
0.55	0	0	0.53	1.8
0.46	0	0	0.56	2.5
0.65	0	0	0.54	1.4
0.46	0	0	0.5	1.2
			0.535	
0.61	0	0	0.71	1.3
0.67	0	0	0.67	1.2
0.53	0	0	0.65	1.2
0.53	0	0	0.67	1
			0.67	

Completion rate	Co-requisite	Success rate	Overall Completion	Achievement Gap
0.55	0.1	0.76	0.57	1.7
0.46	0.1	0.78	0.6	2.3
0.65	0.1	0.8	0.59	1.3
0.46	0.1	0.7	0.54	1.2
			0.58	
0.61	0.1	0.86	0.74	1.2
0.67	0.1	0.86	0.73	1.1
0.53	0.1	0.85	0.7	1.1
0.53	0.1	0.82	0.7	1
			0.715	

Completion rate	Co-requisite	Success rate	Overall completion	Achievement Gap
0.55	0.2	0.76	0.62	1.6
0.46	0.2	0.78	0.64	2.2
0.65	0.2	0.8	0.65	1.2
0.46	0.2	0.7	0.57	1.1
			0.63	
0.61	0.2	0.86	0.78	1.2
0.67	0.2	0.86	0.78	1
0.53	0.2	0.85	0.74	1
0.53	0.2	0.82	0.73	1
			0.76	

B: % assessing in transfer level; ScoreCard: 2007-2008 completion prepared cohort divided by
C: Success rate transfer level course; Basic Skills Cohort Tracker (Fall 2012 tracked through Fa
D: % in traditional remediation; ScoreCard: 2007-2008 completion remedial cohort divided by
E: Completion rate of transferable course for those starting in remediation; ScoreCard: 2007-
F: % in accelerated remediation; ScoreCard: 2007-2008 completion remedial cohort divided b
G: Completion rate of transferable course for those starting in accelerated remediation; Basic
H: % placed into transfer level with concurrent co-requisite support
I: Success rate in transfer level course (I=C)
J: % completing transferable course in one year
K: ratio of completion rate for Whites to completion rate for lowest performing group that cc

2015-2016: Increase accelerated remediation to accommodate 20% of those in remediation

K: Achievement gap decreases by 2% from baseline. This estimate is based on the narrowing

2016-2017: Changes to placement policies with downsizing of traditional remediation

K: Achievement gap decreases an additional 15% from baseline. This estimate is based on the

2017-2018: Addition of co-requisite models to allow students previously in remediation to ta

K: Achievement gap decreases an additional 5% from baseline. This estimate is based on the c

2018-2019: Co-requisite support available to 20% of incoming students; continued downsizin

K: Achievement gap decreases an additional 5% from baseline. This estimate is based on incre

/ completion overall cohort (Note: this is combined math/English but used to estimate transfer-level success rate in transferable course for those starting one level below. Previous research indicates that the success rate in transferable course for those starting one level below is approximately 50%.

2014) success rate in transferable course for those starting one level below. Previous research indicates that the success rate in transferable course for those starting one level below is approximately 50%.

by overall completion cohort times % of traditional remedial sections in Fall 2014 course schedule

2008 Remedial

by overall completion cohort times % of accelerated remedial sections in Fall 2014 course schedule

: Skills Cohort Tracker if available (Fall 2012 tracked through Fall 2014) or rates from established

comprises at least 5% of the college's enrollment profile (Baseline = Scorecard: 2007-2008 Remedial

of achievement gaps seen in the CAP evaluation study, taking into account limited access to accelerated

: narrowing of equity gaps in the Long Beach study when a significantly larger proportion of students

ke transfer level courses with support; continued downsizing of traditional remediation

decreases in equity gaps seen in the ALP study in English and the overall success of a largely non-

g of traditional remediation

easing access to transferable courses with corequisite support.

level placement into each discipline)

at Chabot and LMC suggests that this is a good estimate for the success rate in the transferable c

le

programs at Chabot College for English (376/710=53%) and College of the Canyons for math (95/

al)

derated remediation.

ents are placed into transferable courses.

White sample in the CUNY experiment in math, taking into account limited access to corequisite

course for those who assess directly in (repeats included)

'208=46%)

support.