

Taking Stock of the California Linked Learning District Initiative

Fourth-Year Evaluation Report
Executive Summary

*Roneeta Guha
Nancy Adelman
Nicole Arshan
Jennifer Bland
Kyra Caspary
Christine Padilla
Deepa Patel
Victoria Tse
Adam Black
Francine Biscocho*



Introduction

Since 2006, The James Irvine Foundation has invested more than \$100 million in Linked Learning, a promising approach to transforming education in California.

In 2009, Irvine launched the California Linked Learning District Initiative to demonstrate this approach in nine districts. The multiyear evaluation for this large initiative has a two-fold purpose: to document the work, results and lessons from districts that are applying Linked Learning systemically; and to measure the effect of this comprehensive implementation on student outcomes.

About Linked Learning

Linked Learning integrates rigorous academics with real-world experiences. This approach aims to transform education into a personally relevant, wholly engaging experience — and open students to career and college opportunities they never imagined. Linked Learning builds on more than four decades of experience gained by California schools that combine academic and technical content to raise student achievement. It seeks to improve high school graduation rates and increase successful transitions to a full range of postsecondary education opportunities, particularly for low-income and disadvantaged youth.

Linked Learning is delivered through career pathways, comprehensive programs of study that connect learning in the classroom with real-world applications outside of school. Students select a pathway of their choice.

Core Components of the Approach

Linked Learning combines four elements designed to advance student success:



Rigorous academics. An academic core that includes college preparatory English, mathematics, science, history, and foreign language courses for all students.



Real-world technical skills. A challenging career-based component of three or more courses to help students gain the knowledge and skills that can give them a head start on a successful career.



Work-based learning. A series of work-based learning opportunities that begin with mentoring and job shadowing and evolve into intensive internships, school-based enterprises, or virtual apprenticeships.



Personalized support. Services including counseling and supplemental instruction in reading, writing, and mathematics that help students master academic and technical learning.

A meaningful difference

Compared with similar peers, students participating in certified Linked Learning pathways are:

- Earning more credits in the first two years of high school
- More likely to be on track to complete the courses they need for college eligibility
- Reporting greater confidence in their life and career skills

About the District Initiative

Through the California Linked Learning District Initiative, Irvine is supporting nine districts in developing systems of career pathways that are available to all high school students.

Each of these districts focuses on developing pathways to college and career that meet criteria for quality certification. A total of 33 pathways are certified across the nine participating districts as of July 2013. Certification is provided through a set of Linked Learning partners led by ConnectEd: The California Center for College and Career.

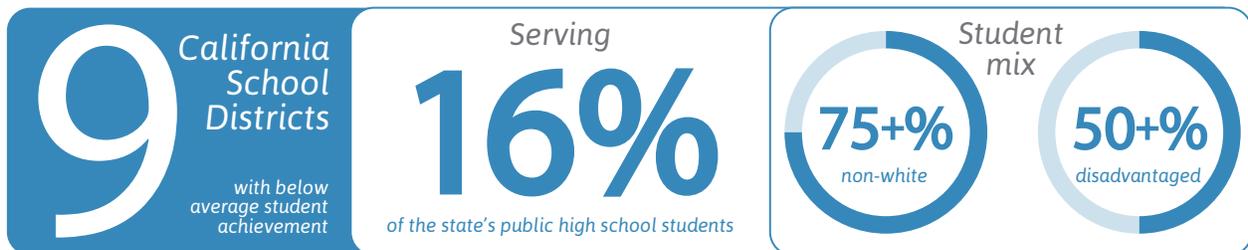
The District Initiative is a vehicle for enhancing the Linked Learning approach, determining what makes it successful at a systemic level, and demonstrating its viability as a comprehensive approach for high school reform. The lessons learned from these nine districts can inform other districts that are beginning to implement Linked Learning.

Participating School Districts

- Antioch Unified
- Long Beach Unified
- Los Angeles Unified
- Montebello Unified
- Oakland Unified
- Pasadena Unified
- Porterville Unified
- Sacramento City Unified
- West Contra Costa Unified

About the Districts

The nine districts participating in the California Linked Learning District Initiative vary in size, and include rural and urban geographies. High school enrollment in these districts ranges from nearly 5,000 to 200,000 students. Collectively, they serve more than 315,000 of the roughly 2 million high school students enrolled in California public schools.



About this Evaluation

The California Linked Learning District Initiative has been evaluated in each year of its implementation by SRI International, an independent nonprofit research institute.

In this fourth annual evaluation report, we look back at the development of Linked Learning systems in the nine districts and examine their experiences to assess the initiative's progress toward reaching its systems- and student-level goals. The fourth year of the evaluation yields new data on student engagement and achievement outcomes from eight of the nine districts participating in the initiative. It also offers lessons from the experiences of all nine districts based on interviews, focus groups, and a student survey.

Read the [full report](#) based on fourth-year evaluation of the California Linked Learning District Initiative.

Student Outcomes

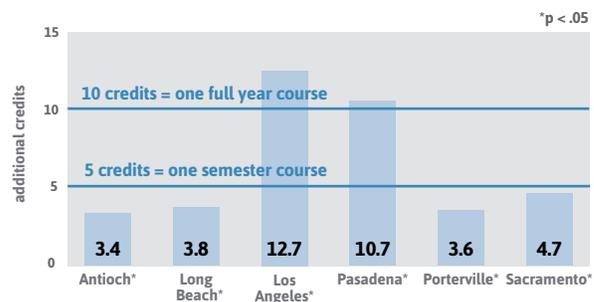
We examined early indicators of pathway students' progress toward graduation and college eligibility, gains in knowledge, and engagement in high school, statistically adjusting for their background characteristics and prior achievement. For this summary, we highlight the 9th- and 10th-grade findings for which we could analyze the largest number of districts and cohorts, providing us with greater confidence in the findings.¹

Success in School and Learning Gains

Students enrolled in certified pathways are making greater progress toward high school graduation and college eligibility than similar peers in 9th and 10th grade.

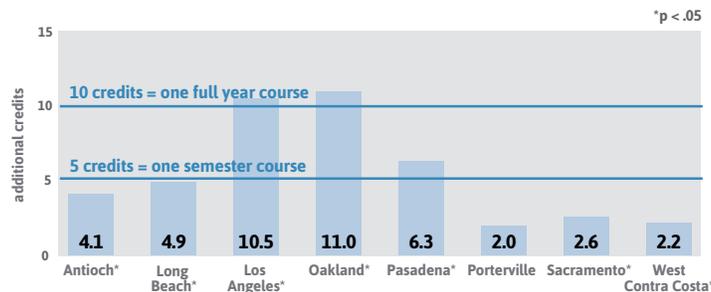
Additional credits earned in 9th grade

9th-grade pathway students earn significantly more credits than similar peers in all six districts with four-year pathways, ranging from 3.4 to 12.7 more credits.



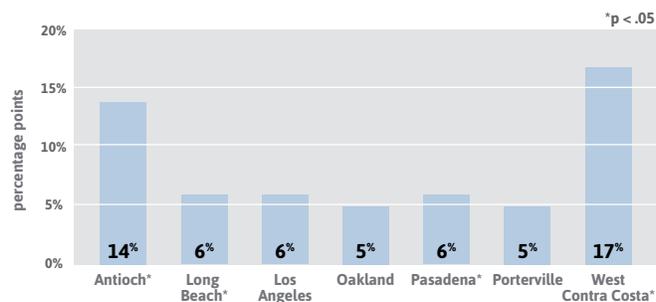
Additional credits earned in 10th grade

10th-grade pathway students also do well on credit accumulation. In seven of eight districts, they earn more credits than similar peers, ranging from 2.2 to 11 more credits.²



Greater likelihood of being on track to complete a-g requirements at end of 10th grade

10th-grade pathway students in four of seven districts are 6 to 17 percentage points more likely than similar peers to be on track to complete the a-g courses required for admission to California's public four-year universities.³



¹ Student outcomes findings are based on data available from eight of the nine districts involved in the initiative. One district did not have any certified pathways.

² The estimate of the difference between the number of credits earned by pathway and comparison students for Porterville is not statistically significant.

³ We did not have data to create an a-g on-track indicator for Sacramento. The estimates of the difference between the probability of being on track to complete the a-g requirements at the end of 10th grade by pathway and comparison students for Oakland, Los Angeles, and Porterville are not statistically significant.

The greater 9th- and 10th-grade credit accumulation for pathway students is meaningful because in each of these grades, the average student in each district accumulates roughly 25% of the credits needed to graduate. Extra credits in these early grades may provide pathway students with a buffer against later failures.

While these findings show that students in certified pathways make significantly more progress compared with similar peers toward graduation each year, these differences do not seem to consistently lead to higher scores on standardized tests of English language arts and mathematics content knowledge. Comparisons of student performance on tests of English language arts and mathematics content knowledge provide mixed findings.

Key indicators suggest that students in certified pathways are making steadier and more significant progress toward graduation and college eligibility than their peers, with greater credit accumulation standing out as a particularly powerful finding.

Engagement in School

We used two measures to assess student engagement: attendance and retention within the district. In five of eight districts, we found some evidence that students in certified pathways are more engaged than similar peers.

Specifically, **pathway students are as much as 7 percentage points more likely than similar peers to remain in the same district** through the 11th grade, indicating that pathways may be more likely to engage students so that they are motivated to remain in school.

Perceptions of Skills Gained

Also relevant to gauging the success of the Linked Learning approach, although more difficult to measure, are the 21st century skills and productive behaviors that students may gain from their pathway experiences. Recent research has focused on the importance of academic mindsets — such as a sense of belonging, self-efficacy, a belief that ability and competence grow with effort, and perceived value and relevance of academic tasks for meeting future goals — in predicting the perseverance and academic behaviors leading to student success in school.⁴

In our student survey, 11th-grade pathway students were more likely than comparison students to report that high school has helped them improve a range of skills.⁵ For example, pathway students were more likely than comparison students to report that high school has helped them:

- Improve their ability to work in a group to achieve a shared goal (62% versus 39%), to work with people in a professional setting (56% versus 33%), to make a public presentation or perform in front of a group (51% versus 31%), and to communicate with adults (40% versus 29%)
- Improve their ability to use information to make good decisions (64% versus 52%), conduct online searches to answer a question (57% versus 43%), summarize information from multiple sources (50% versus 38%), and judge whether they can trust the results of an online search (42% to 26%)

⁴ Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. Chicago: University of Chicago Consortium on Chicago School Research.

⁵ The research team administered the survey to 11th-grade pathway and comparison students in the nine districts. To protect students' privacy, survey results were not linked to student demographic and achievement data. To control for these factors, we sampled comparison students from the same school as pathway students where the numbers of students not enrolled in pathways were sufficient. Otherwise, the team selected comparison schools based on their similarity to the size, achievement level, and demographics of the pathway schools. Across the eight districts with certified pathways, the survey response rate was 88% for pathways students and 81% for comparison students. All reported differences between pathway and comparison students are statistically significant.

- Develop productive mindsets such as seeing the benefits of doing well in school (65% vs. 54%) and believing that they can learn something really hard if they try (58% vs. 47%) or reach their goals with enough effort (66% versus 54%)
- Improve their knowledge of expectations for professional behavior (65% versus 51%), their ability to accept responsibility for the quality of their work (69% versus 57%), and their ability to create a job application letter or resume (40% versus 22%)

Compared with peers, students gain career and life skills (percentage point difference)



KEY LESSONS

Given the planned expansion of Linked Learning into many more California districts through the state's new AB 790 Linked Learning Pilot Program, the successes and challenges of the nine districts with Linked Learning systems implementation over the past four years are highly instructive for districts that are just beginning to engage with or scale up Linked Learning. During the 2012–13 academic year, we asked district and school administrators, pathway leads, coaches, and technical assistance providers to reflect on what is needed to make Linked Learning successful. Drawing on their responses, as well as our own analyses from four years of evaluation research, we have distilled a set of essential elements that can inform current and future district efforts to develop and sustain a system of pathways. These elements fall into three areas: critical district structures, policies, and practices; necessary pathway components; and aligned external technical assistance, partnerships, and networking opportunities. Although there is no definitive order for implementing these elements, the collective experiences of the nine districts suggest starting with a focus on gaining broad stakeholder support for the initiative.

Essential District Structures, Policies, and Practices

- A **common vision** for Linked Learning and collective buy-in for the goals of the initiative, including an explicit focus on student equity, and a comprehensive **communication plan** for sharing this vision
- **Visible and public champions** of the effort, including the superintendent, executive cabinet, and school board, who **actively demonstrate their commitment to Linked Learning** by enacting supportive district and board policies, setting and enforcing expectations for educators, creating and improving data systems, and marshaling funds and resources
- A **dedicated Linked Learning director** with the appropriate resources and positional authority to oversee implementation and the active support of a broadly representative **cross-district Linked Learning leadership team**

Essential Components of Linked Learning Pathways

- Integrated academic and technical **coursework that is authentic and sufficiently rigorous** to achieve desired student outcomes, and **work-based learning experiences that are well aligned** with the pathway theme and **sequenced** over time
- **Strong and active support from school leaders** who understand the core Linked Learning components and oversee the creation of a **master schedule** that allows for regular collaborative planning time for pathway staff as well as “pure” student cohorts that spend all or almost all of their school day moving through classes together
- **Pathway leads with sufficient time and support** to fulfill their instructional and administrative responsibilities
- **A team of pathway teachers who are committed to Linked Learning and voluntarily come together as a community of practice** to develop integrated curriculum, deliver high-quality instruction, and support students
- **Active pathway-level advisory boards**, working alongside pathway leads and staff, that support curriculum development, assess student performance, and identify work-based learning opportunities

Essential External Supports

- **District-level coaching** initially focused on building relationships, spreading the foundational knowledge of Linked Learning, getting key leaders on board, helping shift educators’ mindsets to align priorities and supports with Linked Learning, helping district staff examine and confront traditional leadership structures and district practices, and engaging a broad-based coalition of support
- **Pathway-level coaching**, either external or internal, that is tailored to a pathway’s specific needs and **technical assistance** on specific implementation issues (e.g., master scheduling, development of integrated projects)
- Partnerships with external business and community groups through district-level **broad-based coalitions** that can garner ongoing support and resources for work-based learning and sustain Linked Learning in the long term
- **Networking opportunities** within and across districts, especially when these opportunities allow time for individual pathway or district teams to collaborate and plan

MOVING AHEAD

As a major 21st century redesign of high schools with far-reaching implications for how a given district does business, Linked Learning can succeed and be sustained as a district-level initiative only when it is positioned and supported as a long-term priority. From our four years of evaluation, we have learned that a systemic approach requires tremendous up-front support from and planning by high-level district leaders who create and communicate a vision for Linked Learning, foster stakeholder buy-in, and establish supportive staffing, policies, and structures before shifting focus to the many details of pathway implementation. District coaching is especially important in these crucial early stages because coaches can draw on their previous experiences to help district staff identify the appropriate goals, strategies, and messages.

As soon as districts do begin to address pathway-level implementation, successful implementation demands that they attend to the instructional components of Linked Learning as early and as intensively as possible. While focusing on pathway structures (e.g., work-based learning) can be tempting, it is vital for stakeholders to keep in mind that structures by themselves are not sufficient to help students master academic content, the linchpin to improving student outcomes. Teachers need substantial time and training to develop, scaffold, and deliver high-quality, rigorous college- and career-preparatory curriculum; teachers' needs can become lost in the shuffle if not prioritized. To this end and in today's broader educational context, districts and technical assistance providers should take every opportunity to point out and leverage the synergies between Linked Learning-aligned instructional practices and the Common Core State Standards as teachers receive training to implement the new standards.

For districts just beginning to engage with Linked Learning, such as those participating in the AB 790 Linked Learning pilot, perhaps the most important lesson is to plan and prepare for a long-term commitment to changing how stakeholders think about secondary education and how they operate or engage with high schools. Building collective buy-in and creating Linked Learning-aligned structures and instructional practices requires patience — beginning with major investments of time and energy to create and communicate a clear Linked Learning vision and message — but pays dividends in terms of smooth implementation and sustainability.

For districts continuing with Linked Learning, an important lesson from the initiative is that large-scale reform is a continuous improvement process. The essential elements outlined in this report and in ConnectEd's district framework can provide reference points to re-assess district progress as a whole, looking beyond individual pathway certification as a metric of success with Linked Learning. Districts that are several years into Linked Learning implementation can still benefit from taking the time to examine whether and where there are areas to refine their efforts — for example, by refocusing a district's common vision for Linked Learning, tightening a communication plan, or solidifying district policies and structures.

For funders, technical assistance providers, and the field more broadly, there is a critical take-away: Although Linked Learning takes years of time, money, and sustained effort to implement fully as a district initiative, there are early indicators that can signal a district's trajectory toward long-term success and sustainability. Our evaluation has confirmed that the elements The James Irvine Foundation and ConnectEd identified early on when selecting the nine districts to participate in the initiative — e.g., evidence of support from the district's board, superintendents, and principals; aligned district policies and practices — are indeed among the most essential. Funders and partners can assess a district's progress in the early years toward developing the vision, communication, leadership structures, policies, and other conditions for successful Linked Learning implementation based on lessons learned from the district initiative. They can then use this information to provide guidance to the districts they are supporting and make informed decisions about continued investment.

The expansion of Linked Learning districts in California through state statute demonstrates confidence that this approach to high school education will benefit increasing numbers of students statewide. Based on our analysis of key indicators of student success, outcomes for pathway students are promising. We will continue to track these as well as additional indicators as the first cohorts of pathway students reach the end of high school. Additionally, the summary of the critical factors in Linked Learning implementation above should be helpful as the approach expands to a wider set of educational contexts.





This study was commissioned by The James Irvine Foundation.

Suggested citation:

Guha, R., Adelman, N., Arshan, N., Bland, J., Caspary, K., Padilla, C., Patel, D., Tse, V., Black, A., & Biscocho, F. (2014). *Taking stock of the California Linked Learning District Initiative. Fourth-year evaluation report executive summary*. Menlo Park, CA: SRI International.