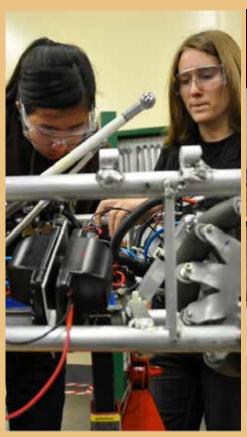
Linked Learning in California: High School Transformation In Three Districts







This study was conducted by the Stanford Center for Opportunity Policy in Education (SCOPE) with support from the James Irvine Foundation.

© 2013 Stanford Center for Opportunity Policy in Education. All rights reserved.

The Stanford Center for Opportunity Policy in Education (SCOPE) supports cross-disciplinary research, policy analysis, and practice that address issues of educational opportunity, access, equity, and diversity in the United States and internationally.

Suggested citation: (2013). Linked Learning in California: High School Transformation In Three Districts. Stanford, CA: Stanford Center for Opportunity Policy in Education.

Stanford Center for Opportunity Policy in Education

Barnum Center, 505 Lasuen Mall Stanford, California 94305 Phone: 650.725.8600 scope@stanford.edu http://edpolicy.stanford.edu



COVER PHOTOS *Left:* Technology, Engineering & Design Academy at Hiram Johnson High School (Sacramento City Unified School District); *Top Right:* Students from Harmony Magnet Academy (Porterville Unified School District) at a work-based learning internship at the Porterville Air Fair. *Bottom Right:* Students from John Muir High School (Pasadena Unified School District) meet with a scientist at the Avery Research Center in Pasadena, looking at samples of products developed at the lab.

Contents

Introduction	1
Linked Learning in Pasadena Unified School District	3
Linked Learning in Porterville Unified School District	4
Linked Learning in Sacramento Unified School District	5
Lesson One—Less is More: Make Reforms Coherent	6
Lesson Two—Distribute Leadership: Lead and Let Others Lead	9
Lesson Three—Plan for Success: Begin with the End in Mind	12
Lesson Four—Communicate: Spread the News Early and Often	15
Cross-Case Conclusions	18
Resources	20

Abstract

This cross-case analysis draws upon case studies that examined how the California Linked Learning District Initiative (CLLDI) has played out in the Pasadena, Porterville, and Sacramento City Unified School Districts. It draws lessons from the experiences of leaders in these districts regarding the importance of reform coherence, distributed leadership, strategic planning and communication to the successful implementation of Linked Learning. Leaders in each district found in Linked Learning an answer to an important problem facing their district that also allowed them to bring greater coherence, relevance, and rigor to the daily work of both staff and students. The highly collaborative nature of Linked Learning required these districts to change and expand leadership responsibilities throughout the districts and the communities they serve. The degree of success of Linked Learning so far can be attributed in part to the ways in which leaders planned the introduction and expansion of the initiative. District leaders have identified clear, consistent, and constant communication about Linked Learning to be a critical component of their success to date.

Acknowledgements

SCOPE extends thanks to the numerous individuals from Pasadena Unified School District, Porterville Unified School District, and Sacramento City Unified School District who helped to inform this case study. SCOPE also wishes to acknowledge the support of ConnectEd: The California Center for College and Career, with whom SCOPE has partnered and collaborated closely in the convening of network meetings and professional development events aimed at supporting districts and their leaders in their efforts to transform schools and implement Linked Learning.

This report was made possible by the James Irvine Foundation, which has provided generous support for Linked Learning as a statewide initiative since 2008.

Introduction

n ever-increasing demand for a highly educated workforce places increased pressure on school districts to prepare students for college and career success. A promising approach called Linked Learning gives districts a coherent framework to address these and other fundamental challenges facing California's high schools, such as increasing academic achievement and learning, reducing dropout rates, and reducing the achievement gap between high- and low-income students.

With support from the James Irvine Foundation and ConnectEd: the California Center for College and Career, nine districts across California have been working to implement Linked Learning in their schools through their participation in the California Linked Learning District Initiative (CLLDI). Recent state legislation is enabling many more districts to begin the process. The Stanford Center for Opportunity Policy in Education (SCOPE) has followed and assisted in the development of Linked Learning in these nine districts and has prepared case studies of three of them.

The intent of the individual case studies is to help superintendents, central office administrators, principals, and teachers see themselves in the experiences of another district, and to illustrate to policymakers how Linked Learning plays out across different district contexts. The purpose of this cross-case analysis is to synthesize lessons that cut across the cases to help other districts be more successful in bringing Linked Learning to their schools. Pasadena, Porterville, and Sacramento City Unified School Districts were selected to represent both urban and rural areas, as well as for their widely varying contexts, including

- their histories with career and technical education,
- their particular visions for Linked Learning,
- the degree of leadership turnover or stability in the districts, and
- the relationships between the districts and their communities.

Leadership is a key factor in any reform effort, and Linked Learning is no exception. The case studies focused on the role of leadership in establishing Linked Learning as the primary reform effort in these districts, and this report focuses on what can be learned from the actions of leaders across these districts in four areas: *coherence*, *distributive leadership*, *planning and implementation*, *and communication*. These lessons describe both successes and setbacks, progress made and progress still needed. The experiences of these districts can provide valuable lessons to other districts about how to prepare for, launch, and scale up Linked Learning initiatives of their own.

To provide context for the lessons, this report begins with basic information about what

ormerly known as "multiple pathways," Linked Learning stresses the integration of academic instruction with a demanding technical curriculum, field-based learning, and student supports. The term "pathway," used frequently in this report, refers to a formal program that implements these core components and the guiding principles of Linked Learning. The model is flexible and can be implemented in various educational settings including, but not limited to, career academies or smaller careerthemed schools. Linked Learning requires extensive collaboration among multiple players in district offices, schools, businesses, local government and civic organizations, higher education institutions, and other community stakeholders in support of student success. Linked Learning looks like in these three districts. Much fuller information about the initiative in these districts is available in the individual case studies. Descriptions of Linked Learning, including a more comprehensive description of the California Linked Learning Initiative from ConnectEd, "Leading High School Transformation for College and Career Success.... A Guide for Developing a System of Linked Learning Pathways," are available at several websites (see the "Resources" section at the end of this report).

Linked Learning in Pasadena Unified School District

asadena has identified Linked Learning as the primary reform strategy for secondary education. At the beginning of the 2011-12 school year, 30 percent of the district's students were participating in eight pathways across the four high schools, with a goal of reaching 58 percent by June 2014. John Muir High School, the district's pilot school for Linked Learning, is "wall-to-wall," with all students participating in one of its three pathways: the Arts, Entertainment, and Media Academy; the Business and Entrepreneurship Academy; and the Engineering and Environmental Science Academy. Blair High School supports two pathways: the Health Careers Academy and the Culinary Arts and Hospitality Academy. Pasadena High School currently supports the Creative Arts, Media, and Design Pathway, a Law and Public Service pathway, and the App Academy for Mobile, Web and Game Development.

By many accounts, in just three years Muir High School very credibly demonstrated the success of the Linked Learning model. Serving a population that is more than 90 percent African American and Latino, Muir made impressive gains in key indicators from 2008 to 2010:

- API for African American students rose from 606 to 634
- API for Latinos rose from 586 to 625
- API for English language learners rose from 555 to 580
- Dropout rates overall fell from 34 percent to 9 percent
- Dropout rates for African Americans fell from 38 percent to 13 percent
- Dropout rates for Latinos or Hispanics fell from 35 percent to 7 percent

The case study identified Linked Learning's integrated curriculum, authentic learning experiences, and personalized support as key factors in these improvements.

he pathways at the heart of the Linked Learning initiative are thematic collections and progressions of academic and technical learning. They are designed to graduate students who are prepared for postsecondary education but who also have authentic work experience in a career pathway. Common pathways themes include careers in health, engineering and sciences, design and innovation, and law and social justice.

Linked Learning in Porterville Unified School District

inked Learning started to emerge as the centerpiece of Porterville's educational reform strategy for high schools in 2008, when the district began to integrate multiple reforms and grants aimed at high school improvement. While a few career-based academies had existed in the district for several years prior to 2008, these academies were not specifically affiliated with Linked Learning models.

Porterville's affiliation with Linked Learning began with the planning and opening of its new Harmony Magnet High School. Today, all five high schools in Porterville offer at least one Linked Learning pathway, and the district has a total of nine pathways in areas as varied as technology, performing arts, environmental science, business and finance, and emerging agricultural technology.

At the time of the case study, about a quarter of all Porterville students were involved in the Linked Learning initiative. The level of student involvement varied significantly from school to school, with only 10 percent of Strathmore High School students participating to 100 percent of Harmony students participating in one of its two pathways.

The district's overall vision for Linked Learning is for all five high schools to have "wall-to-wall" pathways, meaning every student will be enrolled in a pathway of his or her choice.

The initial results of Linked Learning on key student indicators in Porterville are quite promising:

- Pathways had a higher API than the district as a whole
- Harmony Magnet, the school with 100 percent pathway participation, outperformed all schools and pathways in the district
- In all but one instance, pathway students passed the 2010-11 California exit exam for math and English language arts at higher rates than the others students in their schools
- The Academy of Health Sciences pathway at Porterville High School had a greater percentage of female and Hispanic students enrolled in the pathway than were enrolled in the school as a whole a promising indicator of the opportunities that career-themed pathways can offer to groups who have been traditionally under-represented in the sciences.

District leaders attribute these results to raised parent and community expectations and expanded opportunities for all students to experience success through Linked Learning.

Linked Learning in Sacramento Unified School District

acramento City's district leadership has embraced Linked Learning as its primary high school reform strategy. As of the end of 2011-12, nine of the 13 high schools support a Linked Learning pathway, with one more comprehensive school supporting pathways beginning in 2012-13. Across the district, the student participation in Linked Learning during 2011-2012 was 27 percent, although participation rates varied greatly by school size: at five of SCUSD's small high schools, 100 percent of students participated in Linked Learning; at the comprehensive schools, only 16 percent of the student body did so.

By 2015, Superintendent Jonathan Raymond wants 50 percent of SCUSD high school students to be enrolled in a Linked Learning pathway. "We want to have pathways and academies in every one of our high schools and small schools, eventually down into our middle schools," he explains. The ultimate goal, he adds, is "to have every one of our students connected to a pathway or an academy."

In schools with Linked Learning pathways, there have been early indicators of academic growth. API scores at the small high schools have experienced relatively steady increases in base API scores between 2008 and 2011; the other two have posted relatively high API scores in the first two years of their existence. The implementation of Linked Learning pathways at comprehensive high schools is still largely in the early stages of development. Of these schools, Hiram W. Johnson has the highest percentage of students enrolled in Linked Learning pathways (69 percent) and has shown marked improvement in several measures of academic achievement in the past three years. Early indicators of improved academic achievement outcomes at Johnson include:

- a 20 percent increase in 10th grade students passing CAHSEE exams in math and English language arts
- a 56 percent drop in students scoring "below basic" or "far below basic" on the CST test
- Base API Score increased from 611 in 2008 to 669 in 2011
- Dropout rates dropped 49 percent from 2008-09 to 2010-11

The case study suggests these improvements come from greater participation in Linked Learning than exists at the other large comprehensive high schools.

Lesson One — Less is More: Make Reforms Coherent

he case study districts exemplify how adopting Linked Learning can bring coherence to district and school reform efforts. Leaders in these three districts increased coherence by using Linked Learning to provide a clear vision and focus for efforts throughout the district. Coherence is increased when a clear vision for the district increases the shared understanding of goals, and when the district's structure and practices change to reflect that vision. Linked Learning both required and provided opportunities for these districts to connect their central offices to school sites, teachers to other teachers, and schools to community partners in more meaningful ways than in the past. Pathway programs made these connections purposeful, not arbitrary. Linked Learning served as a vehicle to motivate and bring together various stakeholders to work toward a common goal.

Linked Learning enabled the case study districts to gain traction on persistent and urgent reform problems that had defied previous attempts to solve them. For example, the Sacramento City Unified School District (SCUSD) struggled for over a decade with high dropout rates, limited options for students who struggle in traditional settings, and large achievement gaps between student subpopulations. Its high schools, in the words of a blue ribbon committee convened to offer recommendations to the school board, were "too crowded, too big, too impersonal, and incapable of preparing students for a world that [is] radically different than it was a half century ago."

athways include a combination of core classes and employer-based study, each of which is designed to address the pathway theme.

A previous SCUSD reform initiative had focused on building smaller learning communities. These efforts, however, did not address fundamental issues of instructional quality, student engagement or staff buy-in. As one site leader reported, "It was just like saying, 'We're the Design Solutions house,' but we would have needed to have classes that were geared to that.... It just didn't seem authentic."

Linked Learning provided a rationale for smaller learning communities based on the themed pathways that students selected. Linked Learning also provided a compelling vision of rigorous, relevant student work that enabled SCUSD to tackle the deeper issues of student and faculty buy-in. The district is still in relatively early stages of implementation, with relatively low participation in the comprehensive high schools, but clear improvements in test scores and dropout rates in the schools with significant pathway enrollments suggest that instructional effectiveness and student engagement have increased.

Coherence begins with a clear vision

The districts began their move toward coherence by reshaping the district's vision and strategic plans to focus on college and career readiness. For example, Pasadena Unified School District incorporated Linked Learning as one of the foundational pillars of its Excellent Middle Schools and Excellent High Schools reform plans. The superintendent worked with community leaders to include Linked Learning goals in local economic development plans as well. The school boards of Sacramento City and Porterville Unified School Districts revised their strategic plans and vision statements to include Linked Learning concepts such as pathways and college and career readiness language.

Reshaping the organization to reflect that vision

Next, districts increased the coherence of their reform efforts by making structural changes to central office administration. They reorganized departments and created new positions or redefined existing ones to bring Linked Learning and career and technical education into academic departments. This reorganization of district leadership sent a clear signal that Linked Learning is indeed academic and is meant to be a rigorous course of study for all students.

Each district created new administrative teams, bringing together formerly disparate roles and giving key district personnel joint responsibility for developing and implementing Linked Learning. SCUSD has a Linked Learning and Career and Technical Education Department, made up of a Director of High School Reform, the Coordinator of Regional Occupational Programs, a Coordinator of Linked Learning, a Coordinator of Smaller Learning Communities, and Educational (STEM) Entrepreneur, and two Program Technicians. This team has raised the status and visibility of Linked Learning as a core part of secondary reform in SCUSD, and has connected previously autonomous district initiatives, both conceptually and administratively.

In Pasadena, former Superintendent Diaz also assembled a team to take primary responsibility at the district level for implementing Linked Learning. This team was led by the executive director of high schools and included a director of business and school connections, the Regional Occupational Program (ROP) and Academies coordinator, the coordinator of pathways professional development, and a consultant serving as a bridge to post-secondary colleges and universities. In 2010-11 this core team added two business liaisons.

The team, known as the "Pathways Core Team," was charged with managing the district's Linked Learning implementation plan. They met once or twice each month to review the plan, acknowledge progress, determine emerging urgencies, and plan next steps. They were responsible for determining both immediate needs as well as surfacing larger policy or systems issues that needed to be addressed. Members of the pathways core team regularly interacted with sites to help determine these needs and were responsible for reporting progress from the Linked Learning implementation plan to the school board.

Porterville's district leadership for Linked Learning created several leadership teams that advise and guide decisions regarding Linked Learning. The district's Executive Cabinet makes final decisions about the allocation of resources and staffing. A Linked Learning Core Team works directly with schools, providing support and technical assistance on pathway design and certification, student recruitment, and work-placed learning placements. A council made up of industry, higher education, and community representatives serves as the executive advisory board to the superintendent and school board and works to rally support from the community for the pathways approach. Individual advisory boards were also established for each of the pathway programs to support and advise on the design and implementation of the pathways, including work-based placements.

Connecting more of the work to the vision

Beyond the central office, districts also increased coherence in their reform efforts by creating pathway teams at the school level that cut across traditional academic departments. Mathematics and science teachers were teamed with English language arts and career and technical education teachers to design and implement pathways.

These pathway teams have promoted coherence across the system by including both central office administrators and teachers, as well as business and community members. Creating cross-cutting teams focused on Linked Learning put pathway development and improvement at the center of everyone's work.

Holding the vision through transitions

One of the biggest threats to coherence in educational reform efforts is turnover in leadership. The leadership and organizational culture of a district play defining roles in how any education reform, including Linked Learning, is understood, implemented, supported, and sustained. Such factors not only shape how those on the ground — schools, teachers, principals, students, parents, and the community — perceive and experience the reform, but also influence the extent to which these diverse groups of stakeholders will buy into and engage with the goals of the reform. Severe budget cuts early in Sacramento's adoption of Linked Learning forced drastic layoffs and personnel changes at both the district office and school-site levels. As a result, most of the original district team members who had embraced the initiative in the first place had moved on, requiring the new superintendent to rebuild the program infrastructure.

Pasadena's superintendent and several key central office administrators retired four years into its Linked Learning work, but Pasadena was able to maintain coherence and momentum for Linked Learning even in the face of leadership change at the top because it had redefined and expanded leadership of Linked learning across the district. This is discussed in the next section.

Lesson Two: Distribute Leadership: Lead and Let Others Lead

oherence was possible in the case study districts because they distributed leadership across their stakeholders. To succeed, pathways must reflect the needs and interests of the students as well as the opportunities and resources available in the community. These needs, interests, opportunities and resources cannot simply be mandated by the central office or lead administrators. They need to be identified, nurtured, and developed by a diverse set of leaders who bring particular knowledge and skills to the work.

Districts expanded leadership of Linked Learning in several ways. As noted above, within the central office new collaborative leadership teams across academic and CTE offices were created with joint responsibility for the success of Linked Learning efforts. In addition to new opportunities across the central office, leadership was also expanded to school sites, where pathway teams were created with the power to identify student needs and interests and develop pathways to meet them. Principals were identified who would commit to pathways in their buildings and were supported and encouraged to do so. Because work-based learning is a central part of Linked Learning student experiences, pathway teams also gave business and community members opportunities to participate in pathway decisions.

Building the capacity to lead

The leaders in Pasadena, Porterville and Sacramento recognized that creating new roles and teams was not enough; they also deliberately set out to build the capacity of these teams to do the new and different work Linked Learning requires. Central office staff had to work together to coordinate cross-discipline, project-based learning programs. Pathway teams needed to integrate work-based learning into academic curricula. School-based educators needed to learn to work with industry representatives. Building these new leadership capacities required districts to invest in leadership development.

hat is distributed leadership? We use the term to describe a leadership model that spreads authority and accountability across many actors at several levels. Increasingly common nationwide, Linked Learning districts used distributive leadership in their implementation of the initiative to address their school improvement needs. The distributive leadership at work in these districts can be seen in the creation of leadership teams both in the central office and in schools; in advisory teams made up of central office, school, business and community leaders; and in pathway teams made up of educators and industry representatives. These teams work collaboratively on issues of programmatic content and performance assessment.

acilitated by ConnectEd and supporting teams from all nine districts participating in the California Linked Learning District Initiative, the Pathway Leadership Series professional development sequence has focused on essential components of Linked Learning (e.g., programs of study, master schedule, integrated curriculum, authentic assessment).

In Pasadena, the pathways core team engaged with cabinet and department leaders to build a collective understanding of Linked Learning as well as a shared vision for the next few years of implementation. Among those participating in these formal sessions were the chief academic officer, chief human resources officer, and chief of business services. All three districts sent pathway leaders to the Pathway Leadership Series, a professional development experience facilitated by ConnectEd. Districts also sent executive teams to the Leadership Development Series hosted by SCOPE at Stanford University. These summer institutes gave participating districts access to experts from Stanford's schools of business, education, design and engineering.

Another support component provided by ConnectEd and SCOPE were leadership residencies hosted on a rotating basis by one of the nine participating districts. Sacramento served as host in 2011, and its team members reported that preparing to host the other districts pushed them towards a deeper understanding of Linked Learning. It helped them further conceptualize Linked Learning as an umbrella for high school reform and how to better align their work with other initiatives. Sacramento district leaders also hired consultants to train them in facilitating the leadership of others. These central office leaders then worked with school-based leadership teams to help them understand district vision and plans.

Building capacity includes changing habits

Building capacity involves more than introducing new ideas. It also requires individuals and organizations to behave in new ways. To further increase the capacity of his central office to support pathways, the former Pasadena superintendent had all executive team members participate in formal site visitations to see pathways in action. Then-Superintendent Diaz put it this way: "I wanted others in the district office to make connections for themselves because I felt we were talking pathways, but we weren't, as a leadership team, living pathways." These visits led to a stronger collective understanding of Linked Learning. One executive team member reported:

Once you got on the ground, it really made it clear what was going on with Linked Learning. It helps the whole organization when you have executive leadership with a common understanding of goals, objectives, and what it's all about it. We realized that we all affect it.... It helped provide a lot of clarity and understanding around what the program means for kids.

In full-day sessions called "Deep Dives," district leaders in Pasadena guided pathway leaders and staff in conversations about pathway quality. By using criteria and tools provided by the district team, pathway staff members were able to review their progress and articulate professional development needs directly to district leaders. Thus, new behaviors from central office personnel enabled new behaviors from school-site personnel.

Building capacity also involved changing the work environment to facilitate more professional growth. All three districts launched Linked Learning in pilot schools in which all the students were enrolled in pathways as a way to model for the rest of the district what Linked Learning looks like when it is fully implemented and what participation means to students and staff. Porterville went so far as to change the master schedule of its high schools to include an extra period during the day to allow pathway teams to meet and work together on pathway development.

Expanding leadership does not mean abdicating it. Central office leaders still played major roles in advancing the work. Sacramento instituted a set of five Linked Learning "Non-Negotiables," principled guidelines that cover

- equitable access for students,
- ensuring students are scheduled into graded cohorts containing at least one technical core course and two academic core courses,
- pathway communities of practice that allowed twice-monthly staff meetings dedicated to pathway development,
- annual home visits to promote family engagement, and
- using the district student information system to identify each student's pathway membership.

These guidelines helped insure that pathway teams stayed true to the essential components of Linked Learning and district values, but they were broad enough to allow teams to make major decisions about the content and implementation of their Linked Learning pathways. In fact, as pathways grew and developed, some responsibilities, such as recruiting students and industry partners, have returned to central office as a more efficient use of time and talent.

Districts are still grappling with variation in the acceptance of and participation in pathway programs. In general, the smaller high schools have been more successful in making Linked Learning work for students and staff, while student participation in pathways at many of the large high schools remains low. Teacher participation in district professional development offerings around Linked Learning is lower at the larger comprehensive high schools. Pathway teachers cite the need to connect Linked Learning to the Common Core State Standards and to state assessment instruments as ways to address the reluctance of some teachers to commit to the initiative.

Lesson Three — Plan for Success: Begin with the End in Mind

reating coherence around Linked Learning as the primary high school reform effort, expanding leadership opportunities, and building capacity within the organization need to be planned carefully and implemented deliberately if they are to succeed. The district leaders in these case studies took great care in laying the foundation for the success of Linked Learning in their schools. They assessed their district's unique needs and responded with an approach that made sense in their particular context. They took deliberate steps to insure that key stakeholders were involved in Linked Learning plans from the start. They started small, recruited well, and had a plan for expansion of the program. They recognized resource limitations and prioritized and leveraged existing district efforts to establish Linked Learning as the primary district high school reform effort.

For example, Porterville's involvement with the Linked Learning initiative began when the district received a Small High School Construction Grant from a state pilot program, which provided the district with the opportunity and resources to design and open a brand-new high school, Harmony Academy. The district envisioned that Harmony would be distinctly different from the large comprehensive model and would be designed into smaller learning communities, which offered an ideal structure for implementing career-based pathways. Linked Learning allowed the district to take a good idea — small schools — and make it better.

On the other hand, Pasadena used Linked Learning to solve a specific and urgent problem: the need to make dramatic change at John Muir High School, the district's lowest performing high school. From 2005 to 2007, Muir experienced a dramatic drop in academic performance as indicated by their API. With the highest concentration of poor and minority students of all of the high schools in Pasadena (more than 90 percent African American and Latino), this drop was also glaring among significant subgroups. Something dramatic had to occur in order to avoid major state intervention at Muir. District leaders worked with parents, staff, local businesses, and other community members to develop a reconstitution plan, eventually identifying Linked Learning as a strong framework for addressing significant problems.

Creating an environment for change

Adopting a pathways approach represents a significant change in how students learn. But one of the key lessons across these case studies was the importance of changing the district environment in which pathways were introduced. To create and implement a successful Linked Learning initiative takes more than planning the pathway curriculum and identifying partners in business and industry. Districts must address key issues in systems, culture, and conditions in order to build, improve, and sustain high quality pathways.

inked Learning is a significant shift in current practice that nevertheless lends itself well to approaches that take into account the current capacity within the district to adopt and embrace a change — particularly if the district crafts strategic moves that build additional capacity across the district to prepare it for expansion.

Across the case studies, district leaders used Linked Learning to make deliberate changes in how, why, and with whom people worked. They began by establishing Linked Learning as a district priority, reducing the noise and incoherence of multiple initiatives competing for the time and attention of teachers and administrators. Districts and school boards did this by revising their strategic plans and vision statements to include Linked Learning goals and concepts. They also linked other district efforts to Linked Learning, such as Sacramento's district graduate profile, Pasadena's reinvention of John Muir High School, or Porterville's small schools grant. They reorganized central office departments to bring Linked Learning and career and technical

education into the academic program. They used teams to change the way central office leaders interacted with each other and with school sites. One of the districts revised its master schedules to provide common meeting time for pathway teams.

Changing the environment included bringing in new players, or asking old players to take on new roles. Districts enlisted a range of partners to support Linked Learning as the direction of district reform efforts. The school board, the local chamber of commerce, the mayor, parents in the community and local industry leaders were all called upon and convinced to support Linked Learning as solutions to problems they cared about.

Partners can be called upon for expertise as well as support, and these districts did just that. Parents, civic leaders and industry representatives helped craft a vision of what graduates should look like and decide what pathway themes made sense in their communities. Community partners were enlisted to serve on in a variety of ways as their interest in and commitment to pathways grew.

As articulated in Pasadena, the continuum of partner involvement includes:

• Pathway activity level, for partners who want to come in and do mentoring or after-school tutoring, provide guest speakers, host field trips to places like Junior Achievement of Southern California's Finance Park, or provide support for an integrated project;

key aspect of Linked
Learning is the creation of
pathway advisory teams
that give industry, postsecondary
and community representatives a
voice in pathway programming.

- Pathway advisory level, for businesses that have become more deeply involved with individual pathway advisory boards and fundraising efforts, a sign of a stronger sense of pathway ownership for these industry partners. Chaired by an industry leader, this advisory group uses school data to identify specific areas of need; and
- Pathway structural level, in cases where partners have built more formal relationships with pathways in support of pathway quality and student learning experiences. One industry partner, the Jet Propulsion Lab, "took to their formal structure a proposal to adopt John Muir as a school, and so now they're going through the process of identifying all the mentors, all the possible internships, all the job shadowing opportunities," according to one district leader. There has been growing interest in building similar relationships between pathways and post-secondary institutions.

Each of the districts benefitted from the assistance of ConnectEd, SCOPE and other partners connected to the California Linked Learning Initiative. District leaders in Porterville receive external coaching from two ConnectEd staffers who serve as a district liaison and a district coach; Sacramento tapped expertise from the University of San Diego to help principals develop and strengthen pathways. External partners even included other districts in the California Linked Learning Initiative. Through the District Leadership Series and the Pathway Leadership Series, participating districts learned

s part of the California Linked Learning District Initiative, all three case study districts sent executive teams to a District Leadership Development Series that included summer institutes hosted on a rotating basis by one of the participating districts. They also sent pathway leaders to a Pathways Leadership Series that focused on essential components of Linked Learning (e.g., programs of study, master schedule, integrated curriculum, and authentic assessment).

from each other, gaining valuable practical knowledge and advice that accelerated the pace of pathway development.

The right people on the bus

Changing the environment to enable Linked Learning to succeed sometimes meant changing the players themselves. The case study districts made bold staffing decisions and changed personnel policies to safeguard their investments in Linked Learning. Districts worked hard to have building leaders in place who could and would lead and support the development of pathways.

In Porterville and Sacramento, that meant replacing some of the building principals. When collective bargaining agreements and "last in- first out" staffing policies threatened the program stability of pathways in schools with high teacher turnover, the Pasadena district found ways of protecting less senior pathway teachers by successfully arguing that pathways were specialized programs that exempted qualified pathway teachers from staff reduction protocols. Doing so also protected the investment the district had made in building the capacity of these teachers to do the Linked Learning work. The Pasadena school board did something similar when the superintendent who brought Linked Learning to the district retired. It used familiarity with and support for Linked Learning as criteria in hiring his replacement.

These districts planned carefully how they built ownership of the pathway initiative. They started small, with committed staff in pilot schools who could model for the rest of the district what successful pathways can look like. Through pathway program and advisory teams, they solicited important input about key aspects of the programs and also demonstrated that teams have the power to influence the work. Districts deliberately developed marketing and branding resources that clearly explained the pathway concept and its value to students, families, teachers and business partners.

No amount of planning can account for every contingency, or for events beyond the control of the district. Budget cuts and resulting staff reductions threatened the ability of districts everywhere to accomplish their primary missions, let alone implement new reform initiatives. Yet the case study districts have managed to keep Linked Learning growing in spite of external challenges, in no small part because of the thoughtful ways that have focused district efforts and built leadership capacity and commitment in the central office and at school sites. As more than one historic leader has observed, plans are worthless, but planning is everything.

Lesson Four — Communicate: Spread the News Early and Often

stablishing a coherent vision for the work. Expanding leadership roles and the capacity of administrators, teachers and community representatives to do the work. Introducing a fundamentally different approach to teaching and learning and relationships with the community while continuing to run existing programs and services. All of these efforts depended vitally on the ability of district leadership to communicate effectively.

Linked Learning is a systemic reform that can touch every administrator, teacher, student and family in a district, as well as businesses, institutions of higher education and other community organizations. However, Linked learning was different enough from almost anything people had experienced before that making it known and understood was a con-

key but sometimes over-looked component of any communications plan is to *listen*. District leaders in these case studies took the time to solicit input from stakeholders prior to making decisions about strategy or programming. They reviewed data and met with school and community representatives in order to identify needs, priorities and opportunities to be sure that Linked Learning was an appropriate choice of reform strategy.

tinuous process. For Linked Learning to be successful, everyone in the district and in the community needed to understand and appreciate not only the promise it held for improved student success, but also the breadth and depth of the change it represented.

These districts recognized that they had multiple communications goals. First they needed to introduce Linked Learning to a wide audience — district staff, students and families, and the community at large. The core message communicated by each of these districts to every stakeholder was that Linked Learning, regardless of pathway,

is rigorous academic and technical work relevant to every student. In districts that have traditionally treated career and technical education as separate from academic programs, this can be a difficult message to get across.

Next, districts needed to recruit students, staff and external partners to participate in the pathways. To do this, they created high quality marketing and branding materials to recruit students and community partners and used them in traveling presentations, tailoring "road shows" to particular stakeholder audiences.

For example, Pasadena developed a "Pasadena College & Career Pathways" folder. This glossy, accessible packet, with a student-generated slogan — "Your Decision, Your Journey" — has proven effective in both spreading the word and clearly communicating what Linked Learning pathways are about. The packet includes a summary of the vision and goals for Linked Learning pathways, informational pamphlets for each pathway, and a description of what the experience can look like for students, parents, and community partners. The packet also offers guidance on how students and parents together can make an informed choice about pathway options. These marketing materials have become, as one Linked Learning team member described them, the team's "calling card."

Staying on message

Clear and regular communications were vital because the message of change was so hard to get across. A Sacramento leader told of a meeting at which school counselors finally came to understand that pathways are rigorous courses of study open to all students:

A counselor stated, "Oh, Linked Learning is a lot of advising around careers; it's kind of like the old vocational programs, but it's not...." They

got the internship part, and I said, "Why don't you get the academics?" They said, "We don't see what's different. You can still put kids in low-level academic classes.... Parents want kids in a UC A-through-G education." I said, "So do we!" and they replied, "We do?"

Reflecting on the experience weeks later, the Linked Learning department team sent a message to the high school counselors and administrators to make it clear that pathways were expected to be academically rigorous. This message, the director of high school reform explained, was, "If you're in a Linked Learning pathway, we expect you to complete the UC A-through-G sequence with a C or better in every class, end of story."

In fact, the superintendent of Porterville attributed teacher reluctance to embrace pathways not to resistance but to incomplete communications, "not adequately communicating the vision" of how pathway designs are relevant to the community, or how teachers will fit into the model. Any lack of buy-in, he believes, is "not necessarily push-back from a resistance standpoint, but push-back from just a lack of understanding."

An ongoing communication challenge is to prepare teachers themselves to communicate strategically with key stakeholder groups regarding the expansion of pathways. Teachers have expressed particular concerns about conducting advisory board meetings and communicating with industry partners. As the board president of Porterville observed, "I've spoken with teachers who say, 'I'm great here in my classroom talking to 16 year olds, but now you want me to go out and talk to community members? I don't know if I'm polished enough...to speak with the president of a company!"

Walking the talk

Communication is about deeds as well as words. Districts in the case studies used their vision statements and strategic plans to articulate the purpose and vision of Linked Learning. These districts also acted in ways that showed they were serious about pathways as a reform priority. They brought the pathways into the academic life of the district. Porterville changed the master schedule, and Pasadena changed key personnel policies to protect staff trained in Linked Learning. District leaders expanded program decision-making to encourage staff and community ownership of pathway programs. Pathway leadership teams, advisory boards and cross-pathway advisory councils provide the feedback mechanisms that have enabled these districts to adapt pathway programs to realities and opportunities as they arise during program development.

Cross-Case Conclusions



look across the cases suggest several lessons for educators interested in successfully planning, launching, expanding, and sustaining Linked Learning.¹ Specifically, the case study districts:

- Looked at their needs, challenges and priorities and decided Linked Learning could help them meet those needs and priorities.
- Used Linked Learning as the organizing element of reform efforts in the district.
- Created a clear, compelling vision to guide both the change in practice (the move to pathways) and the change in structure and culture (the realignment of roles and responsibilities and incorporation of pathways into the academic mainstream).
- Found ways to build capacity throughout the district to lead the work
 — in the central office, at the schools, within the pathways and among
 the community.
- Discovered that distributing leadership also built commitment to Linked Learning.
- Established pilot sites to introduce Linked Learning to the rest of the district and to the community before expanding.
- Enlisted business and industry partners and gave them a voice in defining pathway content and expectations.
- Recognized the importance of constantly, consistently communicating the purpose, value, and implications of Linked Learning for both students and school personnel.

The Linked Learning model provided these districts with a reform framework that allowed them to make progress toward their distinct improvement goals. It allowed them to focus on a more *coherent* set of priorities around college and career readiness that resonated with a large community of stakeholders. *Distributing leadership* in the development and implementation of the pathways *built capacity* to do the work and willingness to try. Being *strategic* about how to start, what conditions to change, and where to look for support and opportunities enabled these districts to build a foundation for lasting change. Consistent, clear, continuous *communication* of the purpose and vision of Linked Learning and its tremendous potential to prepare all students for success after high school built shared understanding and support across stakeholders.

¹Readers interested in more detailed information and analysis are encouraged to read the Pasadena, Porterville and Sacramento City case studies.

Linked Learning has enabled these districts to make progress on key challenges facing California's education system, from improving student achievement to reducing dropout rates to closing the achievement gaps for minority student populations. Linked Learning engages the community in positive ways, both as clients and as partners. As a respondent in the Pasadena case study put it, "The average business owner gets this. The average community member and voter gets that there ought to be connection to business and industry and our schools." Linked Learning raises expectations and helps to change old perceptions and mindsets about district goals and performance. These districts are still works in progress, but their futures are brighter because of Linked Learning.

Resources

Linked Learning Alliance: www.linkedlearning.org

ConnectEd: http://www.connectedcalifornia.org/

Stanford Center for Opportunity Policy in Education (SCOPE): http://edpolicy.stanford.edu/

California Linked Learning: District Leadership Initiative http://edpolicy.stanford.edu/projects/193

Linked Learning in Porterville: Creating Capacity for Innovation and Change through Collaborative Leadership and Community Engagement http://edpolicy.stanford.edu/publications/pubs/579

Linked Learning in Pasadena: Creating a Collaborative Culture for Sustainable District Reform http://edpolicy.stanford.edu/publications/pubs/593

Linked Learning in Sacramento: Organizing the District and Community for Sustainable Reform http://edpolicy.stanford.edu/publications/pubs/705



Stanford Center for Opportunity Policy in Education Barnum Center, 505 Lasuen Mall Stanford, California 94305 Phone: 650.725.8600

scope@stanford.edu

http://edpolicy.stanford.edu