Leading High School Transformation for College and Career Success

A Guide for Developing a System of Linked Learning Pathways

This guide is a district resource.
Acknowledgments

This publication was written by Roman Stearns, Director, Leadership Development. ConnectEd gratefully acknowledges the generous contribution of time and expertise from a cadre of reviewers that included:

- Christopher Cabaldon, Executive Director, Linked Learning Alliance
- Edwin Diaz, retired Superintendent, Pasadena Unified School District
- Don Gill, Superintendent, Antioch Unified School District
- JD Hoye, President, National Academy Foundation
- Janice Jackson, Executive Director, Stanford Center for Opportunity Policy in Education
- Rob Kessler, retired Superintendent, San Ramon Unified School District, and ConnectEd coach
- Rami Muth, Superintendent, Martinez Unified School District
- Darrell Parsons, Consultant, California Department of Education
- Hudi Podolsky, ConnectEd coach
- Erik Rice, Senior Associate, Stanford Center for Opportunity Policy in Education
- Leslie Rodden, Director of Higher Education and Workforce Development, San Bernardino County Superintendent of Schools

Thanks also to Mary Perry for her assistance in this document’s development and to MPR Associates, especially Patti Gildersleeve and Leslie Retallick, for its design. Finally, this guide and the resources that accompany it would not have been possible without the work and dedication of the districts that participate in the California Linked Learning District Initiative; the photographs and alumni quotes submitted by the National Academy Foundation; the funding and leadership provided by the James Irvine Foundation; and the input and support of ConnectEd staff including Gary Hoachlander, Brad Stam, Rob Atterbury, Kathy Harris, Penni Hudis, Anna Salomone, Elizabeth Stroud, and Dave Yanofsky.
Purpose and Use of This Guide

This ConnectEd Guide for Developing a System of Linked Learning Pathways will introduce school district leaders and their community partners to Linked Learning and a system of quality pathways that can transform high schools, instructional practice, and the student experience. Not intended to be prescriptive, this document can and should be adapted to meet local needs.

This district-level guide is accompanied by an online toolkit that includes a more detailed description of the phases described here and a multitude of resources developed by ConnectEd and several partner organizations, including promising practices from communities across California and the nation. These tools will help districts engage in the detailed work at each phase of the planning, development, and implementation process.

Finally, this guide will provide an understanding of the main phases for designing and implementing a system of Linked Learning pathways, including the time it takes, the key actors in the work, and the various supports that are available to help your district realize its vision.

Systemic Approach to Linked Learning

ConnectEd and partner organizations have developed a set of tools and resources to help districts plan and implement a system of Linked Learning pathways. Linked Learning is different because it aligns all components of the system, from the classroom, to the pathway and school, to the district, and community.

This guide is a district resource.
Nationally, we have a million kids a year failing to graduate. And too many of our young people go to school without knowing why they’re there. But we also have a track record with career academies and Linked Learning that says you can change all that when you provide real workplace experiences to students during their high school years that are connected to their academic studies.

JD Hoye
President
National Academy Foundation
Contents

Linked Learning: Pathways to College and Career Success ....................................................... 1
A Districtwide System of Pathways: The Key to Sustainability and Broad Access ................. 4
Typical Phases for Developing a System of Pathways .............................................................. 7
  Phase 1: Lay the Groundwork and Assess Readiness .............................................................. 8
  Phase 2: Create a Well-Informed Plan ................................................................................... 10
  Phase 3: Formalize Leadership and Implement a Communications Strategy ....................... 12
  Phase 4: Dedicate Resources and Assure Conditions to Sustain Pathways ......................... 14
  Phase 5: Implement Pathways ............................................................................................... 16
  Phase 6: Assess Progress and Revise Plans ......................................................................... 18
Resources to Support Your District’s Work ............................................................................ 19
Sustaining a System of Quality Pathways Requires a Long-Term Strategy ......................... 21
Linked Learning in Action

Health Services Pathway, Applied Technology Center

I notice that being in a pathway is different than what other kids do at traditional high schools—pathways actually relate to the real world.

Ray
9th-grader
Montebello, CA

Health and Medical Sciences Pathway, Hiram W. Johnson High School

I was just doing whatever the school told me to do. I didn’t really have a goal and I didn’t know where I would be 10 years from now. But, being in the Health and Medical Services pathway, I see that everybody knows what they want to do. It’s given me a goal, something to really strive for.

Jesus
12th-grader
Sacramento, CA

Education Academy, Skyline High School

For my internship we teach classes to little kids. Learning how to do that has helped a lot at school with speeches and speaking in class. The smiles on the kids’ faces were just so rewarding to me, I really did feel like a teacher.

Rosa
10th-grader
Oakland, CA
Health Careers Academy, Blair High School

My work-based learning experience has made me really realize that all the stuff I’ve been learning in class is actually happening around me. You know it matters because you’re walking into your internship and they are talking about the exact same thing that you learned the day before.

Chelsea
12th-grader
Pasadena, CA

Los Angeles High School for the Arts

When you have Linked Learning it all connects. I think it makes more sense. You know, kids always ask ‘Why are we learning this? We’re not going to use it later in life.’ By doing Linked Learning we actually see how the things we learn will be important in our real lives.

Arely
10th-grader
Los Angeles, CA

Performing Arts Pathway, Harmony Magnet High School

Here at Harmony we do integrated projects throughout the year that integrate the arts with our core classes. We get to see how the pathways apply to the real world and apply to other subjects.

Dalton
11th-grader
Porterville, CA
In Long Beach, we’ve been very involved in high school reform, but Linked Learning has ratcheted it up ten-fold. On behalf of my kids, my families, and my community, I can’t thank ConnectEd enough for what you’re helping us to do.

Chris Steinhauser
Superintendent
Long Beach Unified School District
Linked Learning: Pathways to College and Career Success

Linked Learning connects strong academics with real-world experience in a wide range of fields, such as engineering, arts and media, and biomedical and health sciences. It helps all students perform at higher levels and prepares them for both college and career.

Linked Learning is a high school transformation approach whose time has come. Its guiding principles and core components are based upon decades of research and the examination of promising practices. It responds to the urgent need to:

- Keep all students engaged in rigorous learning and motivated to succeed;
- Move beyond an outdated high school model built to serve the industrial age and create a more personalized, coherent educational program for youth;
- Be guided by Common Core and other state standards without being limited by narrow state and federal accountability requirements;
- Extend learning beyond the traditional school day, school year, and school site;
- Engage adults throughout the community in the education of our youth;
- Focus on both equity and excellence without letting one compromise the other; and
- Align today’s education with the economy of tomorrow.

Across the nation, educators are finding that a Linked Learning approach to secondary education is helping them meet these needs and realize their community’s vision for all their students.

Data from California show that students in career academies (the most common delivery method for Linked Learning) have better attendance, higher rates of graduation, and substantially higher college eligibility rates than non-academy students. These results are even better for Latino and African American students, helping to narrow the achievement gap.

In a growing number of school districts, community, district, and school site leaders are creating vibrant and sustainable systems of Linked Learning pathways that are transforming their high schools and creating more equitable outcomes for youth.

The districts participating in the California Linked Learning District Initiative led by ConnectEd (see box on page 2) also see this transformation as the means to teach 21st century skills, a new national priority. These districts are using Linked Learning as the strategy for accelerating adoption of the Common Core State Standards and for preparing their teachers and students for new, more rigorous assessments that demand the use of 21st century skills.
These districts’ experiences make clear that the transformational and systemic nature of Linked Learning requires open-mindedness, careful planning, and broad-based participation that includes all members of the education community plus business, civic, and postsecondary partners. It also requires the strategic use of resources and a commitment to continuous improvement. These districts are demonstrating that the effort is worth the reward as teachers strengthen their practice, business communities increasingly support and work with schools, and—most importantly—students’ engagement and achievement steadily rise. Preliminary outcome reports from these districts show promising results.

*Is your district interested in transforming the high school experience to better serve all your students and your community?* ConnectEd and its partners have collaboratively developed high-quality resources to help you—frameworks, guides, promising practices, a coaching model, trained coaches, online support infrastructure, curricula, and more.

### The California Linked Learning District Initiative

Thanks to generous support from the James Irvine Foundation, *ConnectEd: The California Center for College and Career* launched the California Linked Learning District Initiative in 2009. Following a planning phase, each of nine medium and large school districts from across California received a grant of $500,000 per year for four years to implement systems of at least six to eight Linked Learning pathways accessible to any student. Each participating district has high school enrollments of at least 5,000 students, with 30 percent or more eligible for free or reduced-price lunch, and has some existing capacity to develop larger systems of Linked Learning pathways.

The nine districts, which have a total enrollment of about 370,000 are:

- Antioch Unified
- Long Beach Unified
- Los Angeles Unified (Local District 4)
- Montebello Unified
- Oakland Unified
- Pasadena Unified
- Porterville Unified
- Sacramento City Unified
- West Contra Costa Unified

ConnectEd supports the districts in the Initiative by providing pathway and district coaching, leadership development, targeted professional development, model curriculum, an online digital platform with growing functionality (ConnectEd Studios), access to tools and promising practices, networking opportunities, partnerships with many organizations with targeted expertise, a pathway certification process, and more.

*To date, the districts are seeing promising results, including improvements in attendance, CAHSEE passage, a-g completion, and graduation rates.*
What We’ve Learned So Far

In working with nine diverse communities participating in the California Linked Learning District Initiative, ConnectEd has learned many important lessons about this kind of systemwide transformation. In the context of this guide, four lessons stand out:

1. There is no one “right way” to plan and implement a system of quality pathways. In each community, the process will take various twists and turns, and it will progress at different rates.

2. While each district is different, the process of establishing a high-quality sustainable system always includes several phases of development and a broad-based commitment from all the stakeholders involved.

3. The superintendent, board, and community leaders must play central and active roles in the effort over time if it is going to be successful and sustainable.

4. District leadership must be supported by bold site leaders, teachers, parents, and students who are empowered to take risks and to collaborate on a new approach. Without this support, district efforts will not be enough.

This guide generally reflects the experiences of the mid- to large-size districts that participated in the California Linked Learning District Initiative. Where applicable throughout this document, “Adaptations for Small Districts” are also suggested.

You will find the Toolkit for Developing a System of Linked Learning Pathways on ConnectEd Studios at www.ConnectEdStudios.org. It describes each phase in more detail and has links to tools and resources that are available to support your efforts.

To Learn More About Linked Learning

On the ConnectEd website at www.ConnectEdCalifornia.org, you will find the following:

- Evidence from research and data that Linked Learning will improve student outcomes. www.ConnectEdCalifornia.org/linked_learning/evidence
- Videos that reflect student, educator, and community experiences. www.ConnectEdCalifornia.org/video
- Publications that explain what constitutes a quality pathway and how pathways are designed, implemented, and sustained. www.ConnectEdCalifornia.org/about/publications
- Policy reports and other materials that put Linked Learning into the larger context of state and federal education systems. www.ConnectEdCalifornia.org/policy/reports
A Districtwide System of Pathways: 
The Key to Sustainability and Broad Access

Many districts and high schools offer examples of well-designed pathways through existing career academies, small learning communities, and other innovative programs. Typically, a passionate teacher or visionary principal starts and builds these programs, but they are too dependent upon a single individual to be sustainable over the long term. Seldom are pathways central to broader district-driven strategies for high school improvement. One consequence is that only some district students typically have access to pathway options, and those options are often limited to one or two industry sectors such as a health academy or a pre-engineering program. This situation creates inequities in student choice and access and does not lead to broad-based transformation.

With limited district resources and constant pressure to meet the needs of varied constituents, creating pathways as just another option in a menu of district programs is neither affordable nor sustainable.

An increasing number of districts have found that creating a comprehensive districtwide system of quality pathways can leverage and maximize existing district and community resources. Such systems also provide equitable student access to a range of high-quality programs that blend academic and technical courses with students’ real-world experiences.

The term “districtwide system” does not mean that every high school in the district must offer pathways. Nor does it mean that pathways must fully replace traditional programs. It does mean, however, that a district ensures that any interested student can choose among a variety of quality pathways throughout the district and that pathways ultimately serve at least a majority of high school students. In reaching this level of saturation, districts develop the policy and infrastructure to support pathways as the primary strategy for secondary education.

Ideally, any student would have access to pathways in at least six and as many as 12 industry sectors.

Adaptations for Smaller Districts

Smaller districts with a single high school can offer pathways in multiple industry sectors by creating broader themes—such as “business and entrepreneurship” or “media and design”—that are applicable across sectors and thus can provide options for student choice. An entrepreneurship pathway, for example, can engage students interested in agriculture by starting their own organic farm, while students interested in hospitality might open a small restaurant to serve the school staff and larger community.
Career Pathway Industry Sectors

These icons represent major industry sectors. Check with your state’s Department of Education for more information.

- Agriculture
- Arts & Media
- Building & Environmental Design
- Education
- Energy
- Engineering
- Fashion Design & Manufacturing
- Finance & Business
- Health Science
- Hospitality & Tourism
- Information Technology
- Manufacturing
- Marketing & Sales
- Public Services
- Transportation

Data from career academies across the country...show that offering students an academically rigorous curriculum, integrated with career-related programming, reduces high school drop-out rates and prepares students for careers that lead to high earnings. ...We see this as a crucial part of our overall vision for expanding effective career and technical education programs across the country.

Arne Duncan
U.S. Secretary of Education
We started this with two pathways and now we’ve already progressed into nine. We’re hopeful that within the next three years at least 50 percent of our high school population is in a pathway. And the concept of going wall-to-wall, districtwide, seems to be resonating more and more.

John Snavely
Superintendent
Porterville Unified School District
Typical Phases for Developing a System of Pathways

As the diagram below shows, the development of a districtwide system of pathways goes through several phases and requires a sustained commitment. The phases outlined here and the suggested timeline reflect the experiences of the districts that participated in the California Linked Learning District Initiative. These communities found that taking time to build support and plan collaboratively helped them implement and sustain their vision.
PHASE 1
Lay the Groundwork and Assess Readiness

DESCRIPTION: To create a transformed secondary education system using a pathways approach, a school district’s first step is to develop a clear and shared vision, as well as an understanding of the needs, interests, and readiness of all its stakeholder groups.

OUTCOME: A clear understanding of a Linked Learning approach that embraces community values and needs, articulates a clear set of student learning outcomes for graduation, and is both inclusive of and builds upon existing efforts.

TIMELINE: Three to six months.

Creating a transformed secondary education system that will last for decades first requires extensive groundwork to get a clear understanding of the system’s needs, interests, and readiness for change. Such preparation will prevent false starts that tend to dampen people’s enthusiasm and will provide valuable information for responding effectively to those who are concerned about change.

We recommend that the school district and its community partners begin by forming a core team led by a district official. This group, assisted by a district coach who understands the Linked Learning approach, will likely need several months to do the following:

- Gather information about the need for change and how a Linked Learning pathways approach can support goals that the district and community share;
- Build interest and commitment from key constituents, including principals, teachers, parents, students, district staff, and community leaders;
- Assess the district’s readiness, which includes an assessment of teacher practice and capacity and of the district’s culture (i.e., student-centered decision making, use of data and inquiry for continuous improvement, commitment to equity, history of collaboration with the community, tendency toward systems rather than programs, effective channels of two-way (school-district) communication, support for innovation and risk-taking);
- Identify the building blocks among current district programs upon which a system of pathways can be developed and what resources may be available to support the effort;
- Gather input and set up an inclusive process by which the larger community will develop a “graduate profile”—a set of student learning outcomes that identify what all graduates should know and be able to do to be prepared for college, career, and civic participation—as a vision for its youth; and
• Assess resource needs to pursue a systemic Linked Learning approach and map potential funding sources.

Making sure this early phase is a community-based process, not just district directed, will be important to sustaining change over time. This vision of student success helps create a shared commitment to a student-centered systemic change process. That can be the key to eliciting broad support, including resources, industry partners, and work-based learning opportunities for pathway students.

At this initial stage, the superintendent plays a critical role in establishing a healthy environment for beginning a transformation process. Ideally, he or she would set a positive and visionary tone that prioritizes collaboration and inclusiveness, inquiry and honest examination of data, shared responsibility and accountability, and student and teacher voice. The superintendent’s engagement with the core team—and then with broader district and community groups throughout planning and implementation—is crucial to building a strong, sustainable system of Linked Learning Pathways.

The organizational structure for each district will vary but the voices at the table should reflect a variety of community stakeholders. A core team that includes district, school site, postsecondary, business, and community leaders lays the groundwork. Once planning begins, a leadership team of 20-30 members needs to be assembled, with attention to bolstering the presence of postsecondary institutions, business, and community organizations in the conversation. As the district begins implementation, a broad-based coalition of community and industry leaders helps sustain the district-level effort. At the pathway level, industry advisory councils work with pathway staff to plan and establish high-quality programs of study.

When you’re trying to improve a system that is clearly underfunded and is facing huge challenges, it feels good to have a community network that is supportive of the efforts and trying to help solve some of those problems.

Edwin Diaz
Former Superintendent
Pasadena Unified School District

Adaptations for Smaller Districts

In rural communities, or those with smaller school districts, two or more districts could form a partnership and conduct a regional readiness assessment with the intent to create more pathway options and cater to a broader range of students’ interests. A regional or state educational services or resource center or similar organization could help coordinate this kind of effort.
PHASE 2
Create a Well-Informed Plan

DESCRIPTION: A thoughtful, inclusive, and strategic process for designing and adopting a system of Linked Learning pathways is crucial if the long-term vision of a districtwide approach to Linked Learning is to be successful.

OUTCOMES: The district has a clear view of the work involved in creating a high-quality system of Linked Learning pathways and has broad-based support for its plan from key school site stakeholders, including teachers, principals, parents, and students, in addition to union representatives, district officials, and community leaders. The plan has the formal endorsement and commitment of the district governing board. In collaboration with the community, the district has developed and approved a “graduate profile” that will guide future planning and implementation.

TIMELINE: Six to eight months.

Implementing and sustaining a system of high-quality pathways is substantially more complex than merely adding pathways. It involves the following:

- Building awareness and support at the school, district, and community levels;
- Improving the quality of existing pathways;
- Expanding the offerings available to students; and
- Doing business differently—creating a new vision, adopting enabling policies, shifting organizational structures, establishing different expectations and organizational norms, changing teaching and learning practices, sharing responsibility in unprecedented ways, and creatively leveraging funds—all designed to significantly improve student outcomes.

When done well, a systemic approach requires active roles for district departments and school sites, as well as many civic, business, postsecondary, and community partners.

This process holds tremendous potential to transform the high schools and strengthen the economic vitality of a city or region. The design and adoption of such an important transformation can span several years, during which time there may be transitions in leadership. Engaging the broader community in this reform is a key to ensuring its sustainability. To be successful, the community must dedicate adequate time and thought to developing a comprehensive implementation plan, a process that involves representation from and broad communication with the full range of stakeholders both to gather input and to share ideas.
To do so, we recommend that communities:

- Create an inclusive leadership team and form workgroups to address key areas of the Framework for Developing a System of Linked Learning Pathways, including the following:
  - Leadership, equity, and systems alignment;
  - Pathway design and quality; and
  - Operations.

- Conduct a needs and capacity assessment, an iterative process that involves information gathering, awareness building, public engagement, and the development of a shared understanding of Linked Learning that typically takes several months and requires broad participation from stakeholder groups;

- Develop a comprehensive, multi-year implementation plan that specifies plans for the expansion and improvement of existing pathways and the development of new ones—their industry sectors, school sites, target enrollments, year of initiation, etc.; and

- Consider piloting one or more pathways to facilitate a broader understanding of how a Linked Learning approach works and might be implemented.

We really need to give our young people something above and beyond the general academics that they must learn, something that will improve their abilities as they move through high school.

Gayle McLaughlin
Mayor, City of Richmond
West Contra Costa Unified School District
PHASE 3
Formalize Leadership and Implement a Communications Strategy

DESCRIPTION: Distributed leadership, armed with a strong communications strategy, will be able to maximize support, recognizing that the district will encounter many questions and some objections as it proposes and undertakes sweeping changes.

OUTCOMES: The majority of stakeholders in the school district and community are aware of the district’s commitment to a Linked Learning approach and understand and support the vision, key elements of the plan, and the changes that will result. A growing group of community, district, and school site leaders are actively engaged with the work and can articulate the district’s vision and plan for Linked Learning.

TIMELINE: Three to six months.

With the completion of the implementation plan and formal board commitment, the effort to transform the district’s high schools becomes very real for a much larger community of stakeholders. These stakeholders include individual parents, teachers, students, community members, and business and postsecondary partners, many of whom have not actively participated in the planning so far.

In anticipation of this next phase, the district and its community partners will want to create a comprehensive communications strategy that will be responsive to the many questions and concerns that district and community leaders might encounter as a result of proposing and approving sweeping changes. The district needs to communicate its vision and plan, but it is equally important for district leaders to be good listeners and create effective communication channels for site staff and community partners to provide input.

Communications activities need to be part of the leadership team’s thinking from the start. Including the person responsible for district communications on the leadership team helps assure that such thinking occurs and helps prepare the district for this point in the process, when having a clear communications plan becomes critical.

As the district moves from planning to implementation, it is also important to expand and formalize leadership across both the community and the district. Implementation teams will need to include representatives from all key community stakeholder groups.
And crucial to sustaining these reforms over the long haul is the creation of a formal, broad-based coalition of organizations and leaders from across the community who will collectively:

- Maintain the vision;
- Dedicate resources to realize that vision; and
- Share accountability for progress and results.

Industry leaders and representatives play critical roles as members of both the broad-based coalition and pathway-specific advisory boards that guide and support student learning opportunities.

**Adaptations for Smaller Districts**

In rural communities and smaller districts, it may make sense to leverage the expertise and resources of existing regional organizations and structures (e.g., chamber of commerce, county economic development agency, industry association, and postsecondary institution) to help develop a regional communication strategy that supports college and career readiness for area youth.

---

Some of our Linked Learning academies demonstrate higher rates for students meeting college-entrance course requirements and passing the high school exit exam. I think there is clear evidence that students who have the Linked Learning experience have better outcomes.

Gary Yee
Board of Education
Oakland Unified School District
PHASE 4
Dedicate Resources and Assure Conditions to Sustain Pathways

DESCRIPTION: To successfully implement and sustain a system of pathways, a district needs to have in place the conditions that make it possible. It is essential to take the necessary time and dedicate the resources to create those conditions.

OUTCOMES: In the short term, the district acknowledges the importance of these conditions, identifies what resources will be necessary to establish and maintain them over time, and takes the initial steps to put them in place. In the longer term, the district and community continue to provide the resources necessary to maintain the conditions that support and sustain high quality pathways.

TIMELINE: Intensive effort initially, followed by a long-term commitment.

A first step toward successful implementation of a system of pathways generally includes a broad leadership commitment to pathways as the primary strategy for delivering secondary education. Through their actions, district leaders reinforce that commitment. They take steps to support high-quality teaching and learning in each pathway and to assure that all students have a choice of pathway options. They develop strong, collaborative partnerships between school and community. They also leverage existing funding resources and identify new ones in order to do ensure that every pathway has adequate resources to meet and sustain a high level of quality.

District leaders have found that a number of conditions are critical to pathway implementation and long-term success.

Leaders serve as visible and public champions of Linked Learning. District and school leaders, the business community, local postsecondary institutions, labor unions, and community and parent groups all need to demonstrate their commitment and support.

An important starting point is an official and widely publicized statement of the vision for graduates who are college- and career-ready, as defined by the Graduate Profile. Responsibility also needs to be broadly distributed and shared by district and community leaders who agree to be mutually accountability for pathway success and expansion.

District need to take the lead in creating systems that support high-quality learning and teaching. That includes aligning pathway support systems for curriculum, assessment, instruction, and professional development with the student learning outcomes described in the Graduate Profile. The skills and commitment of high school leaders are critical throughout this process. Key strategies for completing this work typically include:

- Supporting the adaptation of master schedules to guarantee common planning time for grade level teams of pathway teachers and cohort scheduling for pathway students.
- Assessing both students’ and teachers’ strengths and needs in relation to outcomes.
- Developing a common instructional framework that defines quality learning, teaching, and leading in a Linked Learning environment.
- Supporting teacher team collaboration centered on student learning.
• Creating an infrastructure to support work-based-learning in cooperation with industry partners.

**Practices and policies that assure equity, access, and choice begin at the district level.** District leaders set the expectations regarding equitable access to pathways for all students. By design, all pathways should appeal to, engage, and successfully serve any student regardless of his or her prior academic achievement, language proficiency, disabilities, or postsecondary aspirations.

Equitable access also depends on students and parents having the information and preparation they need to make informed pathway choices at the end of the 8th grade year, and on middle school students being academically prepared to enter high school pathways. District structures that promote collaboration among middle and high school teachers help assure that this preparation occurs.

Not solely a strategy for transforming high schools, **Linked Learning is also a strategy for preparing the future workforce, expanding the regional economy and improving conditions for those who live in the region.** To realize this potential, and provide a seamless transition for students who graduate from pathways, the district will need to develop strong, active partnerships with local postsecondary institutions, employers, and civic and community leaders. Recognizing that students and families are critical to the success of a Linked Learning approach, the district needs to design and implement an effective family and student engagement strategy.

**To assure that pathways become the primary high school strategy the district will need to align its policies, practices, and resources in every area of operation.** In particular, given the unique instructional and leadership needs of pathways, the district’s human resource policies and practices are an important focus, often involving the renegotiation of union agreements. Pathways often have specific facility and equipment needs that need to be addressed as well. The costs involved in starting up and operating pathways warrant a district’s attention, along with the regular evaluation of pathway funding needs that becomes integral to the district’s overall budget management.

Often, the critical conditions outlined here are put into place concurrently with actual pathway implementation. Initial establishment of some of them will take months, or even years, and sustaining them will be an ongoing effort. As such, during early stages of development, it is most important to acknowledge the importance of these conditions, identify what resources will be necessary to establish and maintain them over time, and take the initial steps to put them in place.
Phase 5
Implement Pathways

Description: Whether or not the district’s system of support is fully in place, each pathway a district offers will be of higher quality if it is developed, supported, and assessed based on the Linked Learning quality criteria and a commitment to continuous improvement.

Outcome: A variety of high-quality pathways that are equitably accessible to any interested student regardless of prior academic achievement or postsecondary aspiration.

Timeline: Typically, one year to plan and three to four years to fully implement.

Ideally, a district and its surrounding community would have made significant progress in planning, building broad-based support, and creating suitable conditions before launching into pathway development.

However, it is more realistic that a district will be eager to improve existing pathways—and conceptualize and plan new ones—on a more aggressive timeline so that pathway development happens concurrently with some of the previous phases. In some districts, particularly where few successful pathways exist, a pilot approach can provide stakeholders with an important “proof of concept” and the leadership team with an important test case grounded in local realities and challenges. If pathway development and district planning do go on concurrently, leaders are advised to proceed thoughtfully and strategically. It is important to publicly acknowledge that some of the infrastructure is being developed simultaneously with pathway implementation and that there may need to be mid-course corrections.

It generally takes one to two years to plan a new pathway. There needs to be adequate time to identify a core team of teachers and nurture their development to become a high-functioning community of practice; establish a distributed leadership

Learn More About the Pathway Development Process


The particular pathway themes selected in any given district should be based on student interests, labor market trends, and the unique community resources (i.e., willing business partners, postsecondary articulation opportunities) available to support a pathway. The diagram on page 17 sets out the basic process of establishing a pathway. At the heart is a commitment to continuous improvement through the collaborative work of the pathway teachers, supported by both site and district leadership.
structure and associated processes; develop a vision, mission, core values, student learning outcomes, and a program of study; share the plans with the larger school community; and create recruitment materials and recruit students.

**One important role of district leaders is to set clear expectations** regarding pathway quality and fidelity to the Linked Learning approach. A collaborative effort among national Linked Learning partners resulted in the development of a set of Essential Elements for pathway quality. The Essential Elements, and associated tools, are designed to:

- Inform the planning of new pathways;
- Provide a framework for assessing pathway quality;
- Serve as a yardstick for formally validating (or certifying) pathway quality; and
- Guide processes to promote continuous improvement.

It’s critical that the superintendent or assistant superintendent clearly articulate expectations for new and existing pathways to meet common standards of quality in order to ensure that students have equitable educational opportunities and make progress toward meeting the learning outcomes. District leaders should shift policies and processes for staff supervision, goal setting, and accountability to reinforce these expectations.

ConnectEd has nurtured the development of an experienced group of coaches who work with district leaders, principals, and pathway teams to guide the creation and continuous improvement of pathways and pathway systems using the same Essential Elements that inform the formal certification process. Districts participating in the California Linked Learning District Initiative describe the ConnectEd coaches as critically important in supporting their ability to succeed in this transformational work. We advise districts to secure experienced, qualified coaching support as they embark upon this effort to transform secondary education. For more information, visit www.ConnectEdCalifornia.org/schools_districts/coaching.
PHASE 6
Assess Progress and Revise Plans

DESCRIPTION: Just as individual pathway teams need to regularly assess quality, monitor progress, and revise action plans, the school district and larger community must assess their progress in developing a system of Linked Learning pathways and periodically revise the multi-year implementation plan accordingly.

OUTCOME: The district and community are using processes and systems that support a culture of continuous improvement, ensuring that pathway quality persists and improves over time.

TIMELINE: Annually.

Continuous improvement is a central practice of high-quality pathways. It is equally important for school district systems.

Ideally, the leadership team would convene periodically to assess the district and wider community’s progress in implementing a sustainable system of Linked Learning pathways and report progress to the broad-based coalition. This assessment helps inform necessary revisions and adjustments as the new system of pathways takes shape. It also helps build the knowledge base and capacity of leaders and emerging leaders, assuring that inevitable personnel transitions do not undermine the district’s vision for a transformed system of high school opportunities for its students.

A culture of continuous improvement is at the heart of the pathway approach. Districts and communities that establish processes and systems to support that culture can successfully ensure that effective teaching and learning and pathway quality persist and even improve through changes in staff, student populations, resource availability, and regional workforce needs.

ConnectEd Coaching Services

The ConnectEd coaching community brings extensive experience and expertise in Linked Learning implementation, data analysis and evaluation, education leadership, and systems transformation.

Focus areas include: structuring processes for inquiry and reflection, providing information and resources for designing and implementing a system of pathways, meeting facilitation and collaboration protocols, clarifying expectations, providing resources, technical assistance, and monitoring timelines and product development. An assigned coach will review the coaching framework with your leadership team.
Resources to Support Your District’s Work

On ConnectEd Studios, www.ConnectEdStudios.org, you will find a wealth of resources keyed to the six phases of system development outlined in this Guide. Here is just a sampling of the many tools and frameworks available.

PHASE 1: Lay the Groundwork and Assess Readiness
- College and Career Readiness Framework
- Stanford Center for Opportunity Policy in Education (SCOPE) Knowledge Brief: Reframing Student Outcomes
- Samples of district graduate profiles

PHASE 2: Create a Well-Informed Plan
- Framework for Developing a System of Linked Learning Pathways
- Needs and Capacity Assessment Tool
- Implementation Plan Template

PHASE 3: Formalize Leadership and Implement a Communications Strategy
- Guide to Building a Broad-Based Coalition
- SCOPE Knowledge Brief: Distributed Leadership

PHASE 4: Dedicate Resources and Assure Conditions to Sustain Pathways
- District parameters for school sites to establish a Linked Learning pathway
- Sample pathway recruitment materials
- SCOPE Knowledge Brief: Design Thinking

PHASE 5: Implement Pathways
- Guide and Toolkit for Building a Linked Learning Pathway
- Essential Elements for Pathway Quality
- Learning and Teaching Framework
- National Academy Foundation “Year of Planning” process

PHASE 6: Assess Progress and Revise Plans
- Rubric to Assess Development of a System of Pathways
Despite the challenges, integrated curriculum is working. It just takes a lot of effort and it’s not going to happen overnight. Frankly, the work pays off because it provides the relevance, the relationships, and the rigor to students. I mean it’s that simple—integrated curriculum is worth it for kids.

Jodiann Beeson
Lead Teacher
Antioch Unified School District
Sustaining a System of Quality Pathways Requires a Long-Term Strategy

Undertaking a systemic approach to creating Linked Learning pathways in a school district is a departure for an education system accustomed to changing incrementally through the use of small-scale experimentation such as pilot programs that serve a limited number of students. There is much that can be learned from these programs, but if the long-term goal is to transform student experience for the vast majority of our youth, such experimentation must be part of a larger and long-term strategy for system-level change.

The experiences of districts that have attempted this kind of change, including those that participated in the California Linked Learning District Initiative, provide an important lesson. District leadership can and does change, particularly at the superintendent level. If success of a Linked Learning initiative is based only on that leader’s vision, it can easily fail due to turnover of leadership alone.

To be sustainable, the vision for and commitment to Linked Learning must be shared by a range of influential community, business, parent, and education leaders. It also requires the district to build knowledge and develop the capacity of leaders and emerging leaders at all levels, community, district, school site, and pathway. Some key strategies for sustainability include being very inclusive from the outset, expecting active involvement and leadership, and communicating often and clearly about Linked Learning to every constituency within the district and community.

Taking the Next Step Toward Transformation

Systems change requires shifting the organizational culture. That can mean dismantling and recreating structures and procedures that may be long-standing, even institutionalized; redefining traditional roles and responsibilities; and revising policies and regulations.

It requires bold leadership and a willingness to allow previous constraints to become variables that may be changed. And it requires districts and surrounding communities to continually ask themselves some tough questions:

- What matters most?
- How might past practices, procedures, and structures be inconsistent with what matters most?
- How can we ensure that all future decisions are driven by what matters most?
- How can we institutionalize new practices, procedures, and structures, while building in continuous improvement mechanisms that allow for future revision and refinement?
Without a doubt, the process will be difficult and take time. But, there is no question that our youth deserve better and that the health of our economy and civic society depend upon a dramatically improved education system.

With resources as limited as they are in public education and other sectors, one may reasonably ask whether a community can afford to pursue a long-term, large-scale system change effort. A more apt question is “Can we afford not to?”

Whether your next step is to learn more about Linked Learning or get started with your transformation process, ConnectEd staff—and external experts who have already begun the journey—are available to share their insights. **We invite you to explore the many resources available on the ConnectEd website, or contact us directly at info@ConnectEdCalifornia.org.** We would be happy to answer your questions or connect you with the many districts and schools that are actively involved in Linked Learning.
Academy of Hospitality and Tourism, Maui High School

The NAF Academy of Hospitality and Tourism definitely changed the course of my future for the better. I sacrificed a lot to get though college while working. It was all worth it, I love my job!

Konrad
Alumnus
Maui, HI

Renaissance High School for the Arts

I’m excited about the possibility of accelerating Linked Learning at Renaissance High School. I would like to see our kids being exposed to even more professional disciplines and universities across the nation. I’m pleased to be involved and to have my child here—it’s a win-win situation for our kids.

Carlos Leal
Parent
Long Beach, CA

Academy of Finance, Gaithersburg High School

NAF really provides a lifeline for students who are underprivileged. It gives them opportunities to see what’s out there in the world, to make a positive impact in their own lives, and contribute to their community.

Natasha
Alumna
Gaithersburg, MD