Linked Learning in Pasadena: Creating a Collaborative Culture for Sustainable District Reform

By Erik Rice and Sara Rutherford-Quach
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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.


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Cover Photo: Students from John Muir High School meet with a scientist at the Avery Research Center in Pasadena, looking at samples of products developed at the lab.
Acknowledgements

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Abstract

It's all about ownership, implementation, and sustainability. Unless you have buy in and commitment from folks in the classroom, at the school sites, and in the community, it's not going to be sustained.

— Edwin Diaz, former Superintendent, Pasadena Unified School District

This is the story of how Pasadena Unified School District (PUSD) is creating sustainable high school reform. PUSD, through a set of district leadership practices, thoughtfully built the capacity of and sense of ownership among essential stakeholders to design, implement, and support a system of Linked Learning pathways. Though firmly anchored by the visionary leadership of a superintendent, the PUSD Linked Learning story extends to school sites, civic and industry partners, and the broader community. This story also highlights the impact that a change in leadership can have on reform efforts, the ways that ownership of an initiative can be expanded to a wider pool of key stakeholders, and how those stakeholders can increase capacity to sustain the vision and implementation of reform beyond one leader.

This story of district leadership in implementing Linked Learning highlights the following:

• A significant shift, through the implementation of Linked Learning, in what was historically a strained relationship between the school district and community.

• An evolving relationship between the central office and site leadership through the implementation of Linked Learning.

• An implementation strategy that focuses on building capacity for implementing and ownership for the success of a major initiative across the district and the broader community.

• Early evidence that the district’s vision for Linked Learning has contributed to improved student learning.
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Overview

About Linked Learning

Pasadena Unified School District (PUSD) is one of many districts across California that has pursued reform efforts to increase graduation rates and prepare students so that they leave the K-12 system both college and career ready. With an ever-increasing demand for a highly educated workforce, particularly in high growth job sectors such as business, arts and design, healthcare, and transportation, there is increased pressure on school districts to prepare students so they may successfully pursue post-secondary college and career opportunities.¹

Among the most promising district reforms in California is Linked Learning, which focuses on preparing students for both college and career success. Formerly known as “multiple pathways,” Linked Learning stresses continuous integration of academic instruction with demanding technical curriculum, field-based learning, and student supports. The term “pathway,” used frequently in this case study, 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 career-themed schools. Linked Learning also requires collaboration among district, school, industry, civic, higher education, and other community stakeholders in support of student success.

Linked Learning is different from traditional vocational and career technical education high school programs. Those programs, which provide explicit career preparation for students “often lack the academic and technical rigor required for success in postsecondary education and high-skilled careers.”² Linked Learning is based on an integrated model that offers the academic and technical skills necessary for a complete education and a successful future.

The California Linked Learning District Initiative is a statewide effort launched by the James Irvine Foundation in 2008. As of 2011, this initiative supports nine California school districts, including PUSD, to develop, implement, and sustain a system of high-quality pathways that are accessible to every student in the district. This includes work on systems, culture, and conditions in order to build, improve, and sustain high quality pathways. The Stanford Center for Opportunity Policy in Education (SCOPE) is part-
nering with the James Irvine Foundation and ConnectEd: The California Center for College and Career to provide professional development for district and pathway leaders and to capture and share knowledge from the field.

**Context for this Case Study**

This case study is one of three district-level case studies written by SCOPE about districts participating in the California Linked Learning District Initiative. Case study districts were selected to represent both urban and rural areas and for their widely varying contexts in terms of their history with career and technical education, vision for Linked Learning, leadership turnover, and community context.

The case studies take a close look into the role of district leadership in implementing Linked Learning and aim to provide insights that will benefit other Linked Learning districts, as well as offer important lessons for districts undertaking other systemic reform. The cases are not meant to be evaluative; rather they illuminate different approaches to district leadership, best practices, emerging lessons, and new challenges.

Each case study is framed around one overarching research question: *How does district leadership guide and support the development and implementation of the Linked Learning Initiative?*

**Methodology**

Data for this case study were collected between September 2009 and September 2011. Data collection activities included formal interviews with district, site, and community leaders, observations of activities related to district planning and implementation, and a review of essential documents. Additional access to district and school leadership, industry partners, and board members was made possible during the Initiative’s District Leadership Series — a professional development series for participants that SCOPE facilitated in partnership with ConnectEd. In addition to these formal data collection activities, the on-going relationship between SCOPE and PUSD has enabled further understanding through informal dialogue with district and site leaders, community members, and coaches.

Data was organized and coded by central themes to inform the writing of case studies. Follow-up interviews were conducted with key informants to fill in gaps in the data. The case studies were completed and checked with key members within the district for accuracy of factual information.

A detailed description of data collection activities is provided in Appendix A.
District Context for Linked Learning

About PUSD

Located 10 miles northeast of downtown Los Angeles, PUSD serves just under 20,000 K-12 students. PUSD has 16 elementary schools, 2 K-8 schools, 3 middle schools, 4 high schools, 1 continuation school, 1 independent study school, and 4 independent charter schools.

As indicated in Table 1 (below), PUSD serves a diverse student population, with 59% Latino students and 17% African American students; 21% of the student population is designated as English language learners, another 15% were recently re-designated as English proficient, and 68% of the students qualify for free- and reduced-price lunch.

Table 1: PUSD and Community Demographics

<table>
<thead>
<tr>
<th></th>
<th>PUSD</th>
<th>Pasadena</th>
<th>Altadena</th>
<th>Sierra Madre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Population</td>
<td>137,122</td>
<td>42,777</td>
<td>10,917</td>
<td></td>
</tr>
<tr>
<td>Ages 5–19</td>
<td>19,803</td>
<td>21,574</td>
<td>8,082</td>
<td>1,727</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>14%</td>
<td>39%</td>
<td>40%</td>
<td>72%</td>
</tr>
<tr>
<td>Latino¹</td>
<td>59%</td>
<td>32%</td>
<td>25%</td>
<td>14%</td>
</tr>
<tr>
<td>African American</td>
<td>17%</td>
<td>10%</td>
<td>23%</td>
<td>2%</td>
</tr>
<tr>
<td>Asian</td>
<td>5%</td>
<td>14%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>English Language Designation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language Learners</td>
<td>21%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-designated English proficient</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Income for 18 and younger</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18 years</td>
<td>68%</td>
<td>16%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Education level for 25 and older</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma or higher</td>
<td>74%</td>
<td>83%</td>
<td>86%</td>
<td>97%</td>
</tr>
<tr>
<td>Bachelors degree or higher</td>
<td>28%</td>
<td>46%</td>
<td>42%</td>
<td>57%</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
<td>28%</td>
</tr>
</tbody>
</table>

While the Linked Learning model is meant to support all students for college and career readiness, it is strongly focused on helping close the opportunity and achievement gaps for populations such as these.

**Linked Learning in PUSD**

PUSD has identified Linked Learning as the primary reform strategy for secondary education. At the beginning of the 2011-12 school year, PUSD had a total of 30% of students participating in pathways with a goal of reaching 58% by June 2014. John Muir High School, the first pilot school for Linked Learning, is “wall-to-wall” — meaning all students participate 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 while Marshall High School supports the Information Technology Pathway.

**District Culture**

The vision for and commitment to a formal system of Linked Learning pathways began in 2007. Both district and pathway leaders identified the hiring of Superintendent Edwin Diaz in early 2007 as a major turning point. To a large extent, both district and site leaders characterized district culture, prior to the leadership change, as an “us vs. them”
relationship, with competing priorities and bureaucratic nightmares. One district leader observed that this environment contributed to relative paralysis whereby bureaucratic constraints and power dynamics stifled innovation. Soon after his hiring, Superintendent Diaz took deliberate steps to shift to a more collaborative district culture, ultimately leading to a widely shared commitment to Linked Learning.

Of particular significance in the PUSD story is how the district culture has shifted in the context of tremendous leadership transition. At the end of the 2010-11 school year, after four years of service, Superintendent Diaz retired from the district. Several other key district leaders also retired or left at that time, including the chief academic officer, the executive director of high schools, and the director of communications and community engagement. Among the core themes of the PUSD story is how the district has worked with both the sites and the broader community to sustain Linked Learning beyond this transition at the central office.

More details of this evolution are provided in the “History of Linked Learning in PUSD” section.

Community Context for Linked Learning

About the Students and Community

Although the majority of PUSD students come from the city of Pasadena, the district also serves the communities of Altadena and Sierra Madre. Unless specified otherwise, reference to “community” will include all three cities.

History of Relationship between the School District and the Local Community

While this is a story of a deepening relationship between the district and the broader community, such connections are a relatively new phenomenon. Historically, explains a PUSD school board member, “we’ve had a real disconnect between the community and the school district.” This rupture goes “back to the days of court-ordered desegregation.” School demographics changed and, over time, White families, the predominant group making up the higher socioeconomic demographic, left the district for private schools. What resulted from this, one district leader said, was a school district with a high poverty rate where “poor performance and poor leadership was allowed.” The school board member recalls how city council candidates would predictably engage in a “contest to see who could bash the school district the most.”

The ripple effects of this rupture between the school district and the community are still apparent more than 30 years later. Today the school district’s demographics hardly mirror those of the larger community. Among the most glaring discrepancies shown in Table 1 are the following:
• **Ethnicity:** PUSD serves a proportionally low number of White and Asian families (19% total) as compared to the communities they serve (53% White and Asian combined for Pasadena, 45% for Altadena, 80% for Sierra Madre). In comparison, the district serves a disproportionately higher number of Hispanic or Latino and African American families (76% total) than is represented in the communities they serve (42% Hispanic or Latino and African American for Pasadena, 48% for Altadena, 16% for Sierra Madre).

• **Income:** 68% of PUSD students qualify for free-and reduced-price lunch, while none of the communities they serve have more than 16% of families living below the poverty line.

• **Education:** The education level of families served by PUSD is substantially lower than the citizenry of the communities the district serves.

By building a system of high quality Linked Learning pathways, PUSD hopes to not only meet the needs of current students and families, but to provide a model for secondary education that will attract a student population that more accurately represents the community at large.

**Economic and Workforce Context**

Pasadena is home to a wide array of educational, employment, and cultural resources including the California Institute of Technology (CalTech), the Jet Propulsion Laboratory, Kaiser Permanente and Pasadena City College. In fact, Pasadena features the rich resources of an urban environment but remains small enough to function as a coherent community. However, in the 2011 draft Economic Development Strategic Plan (EDSP), the Economic Development Division for the City of Pasadena has also articulated the priority to invest in the growth and development of major industry sectors in Pasadena, including retail business, healthcare, technology, tourism, green businesses, art and entertainment, and community based organizing. As stated in the report:

Aligning workforce training with future industry needs will be critical to the future of Pasadena. By facilitating partnerships between stakeholders, business and education providers, Pasadena will ensure proper training for its workforce. This includes K-12, community college, trade school and university level education. Consideration must be given to addressing the “skill gap” between an aging and retiring workforce and an emerging generation so that Pasadena businesses may continue to thrive. (p.3)

This rich potential, along with the community’s need for workforce development, makes it an ideal site to implement Linked Learning, a model that requires a deep level of partnership between the school district and the community. The EDSP specifically cites Linked Learning Pathways in PUSD as a targeted strategy for addressing workforce needs in Pasadena. (p. 22)
History of Linked Learning in PUSD

Areas of Need Identified

Beginning his tenure in early 2007 with a “listening and learning” campaign, Diaz quickly learned about the areas of critical need in the district and the opportunity to invest in Linked Learning as the primary reform strategy for high schools in the district. He spent nearly four months reviewing data, visiting school sites, and establishing relationships with school, district, and community stakeholders in order to identify areas of need. At the end of this time period, Diaz identified two critical indicators of the need for substantial academic reform: high school underperformance overall and the severe underperformance of one high school in particular. The identification of these two areas of need greatly contributed to PUSD’s decision to pursue Linked Learning.

High school underperformance: PUSD maintained a steady increase in the Academic Performance Index (API) over the previous several years (from 662 in 2004 to 706 in 2007). However, a closer look at the data revealed that elementary schools were driving this increase, with secondary schools lagging behind, particularly two out of the four high schools that had a 640 or lower API in 2007.
Severe underperformance by John Muir High School: One of the major catalysts for adopting Linked Learning as a primary reform strategy for secondary education in PUSD was the need to make dramatic change at John Muir High School, the district’s lowest performing high school. As Table 2 (above) demonstrates, 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 PUSD (more than 90% African American and Latino), this drop was also glaring among significant subgroups.

Superintendent Diaz warned that something dramatic had to occur in order to avoid major state intervention at Muir High School. Figure 1 (page 9), highlights the startling percentage of students at John Muir High School who scored below proficiency on the California Standards Test (CST) in 2007 in English language arts and math. This data was used by school leaders as evidence to build a sense of urgency for change at the school.

Building on Existing Strengths

During his early outreach efforts, Superintendent Diaz also learned about the areas of strength and success, what he referred to as “levers” that would eventually serve as a vital foundation for Linked Learning. These included:

- **History of career academies:** Some California Partnership Academies had been part of PUSD’s high school program options for many years. However, Diaz also reported that they were operating as isolated programs, lacking systemic support to thrive.

- **Rich community resources:** As detailed in the Economic and Workforce Context section, Diaz quickly learned that the community served by PUSD had tremendous assets that could serve as a foundation for Linked Learning.

- **Community involvement.** While there was an overall rift between the school district and the broader community, preexisting programmatic partnership did exist between industry partners and many of the career academies. There was also a strong commitment from the mayor’s office to invest in PUSD. Diaz believed these partnerships could serve as the foundation for a deeper relationship with the community.
Early Action

Following the “listening and learning” phase, Superintendent Diaz presented his findings to the PUSD Board of Education during the summer of 2007, and the district initiated critical steps that eventually led to the adoption of Linked Learning as the primary approach to secondary reform. Among the critical steps were the following:

**Integrating Linked Learning into the district’s strategic plan:** During the 2007-08 school year, PUSD incorporated “College-Going Culture/Career and Technical Education” as one of the foundational pillars of the district’s Excellent Middle Schools reform plan. Soon after, PUSD added a priority into the corresponding high school reform plan that stated, “Students are engaged in multiple pathways that integrate academic and technical study.”

**Reconstitution of John Muir High School:** In October 2007, the PUSD Board of Education approved the reconstitution of John Muir High School for the 2008-09 academic year. With a strong focus on student performance, high-quality instruction, and the delivery of a rigorous academic program, the school board directed district staff to redesign the school according the following guiding principles:

- Small, caring, relevant, rigorous, and personalized learning communities
- Powerful standards-based teaching and learning
- Culture of continuous learning
- Student-centered systems and safety nets
- Youth voice is valued
- Parents and community members are partners
- All stakeholders are responsible and accountable for results

---

**Figure 1: John Muir High School's 2007 CST**

<table>
<thead>
<tr>
<th>Subject</th>
<th>9th Gr ELA</th>
<th>10th Gr ELA</th>
<th>11th Gr ELA</th>
<th>Algebra</th>
<th>Geometry</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Below Proficient</td>
<td>75%</td>
<td>75%</td>
<td>84%</td>
<td>97%</td>
<td>97%</td>
</tr>
</tbody>
</table>

During the 2007-08 school year, as Superintendent Diaz recalls, the district worked with parents, staff, local businesses, and other community members to develop a reconstitution plan in line with these guiding principles. Wanting to move John Muir from being the “step child of the district” to a “leader in what secondary education can look like,” the team identified Linked Learning as a strong framework for this reform and soon received support from ConnectEd, an organization partnering with the Irvine Foundation to implement Linked Learning in districts and schools across California. In order to develop Linked Learning pathways into “small, caring, relevant, rigorous, and personalized learning communities,” the high school was redesigned into three career-themed academies: business and entrepreneurship; engineering and environmental science; and arts, media, and entertainment.

**Formal Pursuit of Linked Learning**

In early 2008, through a series of progress updates, school and district officials garnered increasing support from the PUSD School Board for what became more optimistically known as Muir's “reinvention plan.” They agreed with district staff that the Linked Learning model helped address their guiding principles. In addition, with Muir serving as a pilot site for this highly promising model for secondary education, Diaz reports, “We realized there was tremendous potential to implement at Muir and to scale up across the district.”

Given this larger vision for reform, the district pursued additional funding from the James Irvine Foundation as part of the California Linked Learning District Initiative to begin to develop a system of Linked Learning pathways. In 2008, PUSD was awarded a $125,000 planning grant in order to not only focus on Muir High School, but to begin the development of a system of Linked Learning career pathways across the district.

In October 2008, the superintendent and board approved a formal articulation of the district priorities referred to as “The Approach to Excellence II.” This included the goal, “To establish a system of 10 pathways of college and career in PUSD high schools.” At the same time, the district created a cabinet level position, executive director of high schools, that held responsibility for supporting the growth and development of Linked Learning pathways. In 2009, PUSD received a two-year $1.2 million implementation grant from ConnectEd to support the continued development and implementation of this system of pathways.
### Table 3: Early Planning for Linked Learning Timeline of Key Events

<table>
<thead>
<tr>
<th>Time</th>
<th>Key Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter 2007</td>
<td>Edward Diaz hired as superintendent of PUSD.</td>
</tr>
<tr>
<td>Spring 2007</td>
<td>Superintendent Diaz officially begins tenure. Begins “listening and learning” phase.</td>
</tr>
<tr>
<td>Spring 2007</td>
<td>Superintendent Diaz conducts “listening and learning” campaign.</td>
</tr>
<tr>
<td>Summer 2007</td>
<td>Superintendent Diaz presents findings to PUSD Board of Education with major focus on critical need for reform at secondary level, with particular urgency at John Muir High School.</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>PUSD School Board approves action to reconstitute John Muir High School.</td>
</tr>
<tr>
<td>2007-08 school year</td>
<td>John Muir High School reconstitution plan developed through school and community engagement process. Significant focus on Linked Learning and core of the reform model.</td>
</tr>
<tr>
<td>Spring 2008</td>
<td>PUSD awarded initial planning grant to begin development of a system of Linked Learning career pathways.</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>Formal integration of Linked Learning into district strategic plan.</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>John Muir High School reconstitution complete with wall-to-wall Linked Learning pathways.</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>PUSD receives two-year implementation grant to support development and implementation of system of pathways.</td>
</tr>
</tbody>
</table>

**Piloting of Linked Learning at Muir High School**

The implementation process of Linked Learning at Muir occurred at a relatively rapid pace, creating some uneasiness for district and pathway leaders. As one leader described it, it felt like the district was “driving the bus at the same time as putting the wheels on.” At the same time, the district plan was driven by very deliberate steps to ensure that Linked Learning, as their primary reform model for high schools, was understood and supported in both the district and community. Among the more notable strategic actions taken by the district in this regard was its plan for piloting and expanding Linked Learning.
PUSD elected to first focus on John Muir High School in order to pilot the Linked Learning model, wanting to “start in a concentrated way at Muir so other schools can see what it can look like.” They believed that success at John Muir High School would help build credibility in Linked Learning for other high schools.

By many accounts, in just 3 years, Muir High School has, in fact, very credibly demonstrated the success of the Linked Learning model. The school has evolved from a traditional, comprehensive high school to a campus with three Linked Learning pathways that offer integrated curriculum, authentic learning experiences, and personalized support for students. Early indications are that Muir, still with more than 90% of its students identifying as either African American or Latino, has made impressive gains during the initial years of implementation of Linked Learning. Among the gains are a dramatic reduction in dropouts over the last two years (see Table 4 above). In addition, as shown in Table 5 (page 13), Muir’s Academic Performance Index has steadily risen since the 2007-08 school year for the school as a whole as well as for significant subgroups. This represents the fastest rate of increase of all the high schools in PUSD during that time period.

Since the initial implementation of pathways at John Muir in the 2008-09 school year, the district was able to identify some major lessons that would impact policies and practices described in this case study. Among the early lessons, explored in more depth in later sections, were the following:

- The need to build and sustain pathways with qualified, committed teachers and staff.
- The need to provide professional development for pathway teachers and leaders that would help address needs of pathway teachers.
- The potential for business and industry partners to inform the vision and direction of a pathway.

### Expansion of Linked Learning

During the 2007-08 school year, while working on John Muir High School’s reconstitution, district leaders also acknowledged the need for significant change in other high schools around the district.

Between 2009 and 2011, PUSD expanded their work beyond the three pathways at John Muir High School to other schools across the district (see Table 6, page 13).

<table>
<thead>
<tr>
<th></th>
<th>2007-08*</th>
<th>2009-10*</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>34%</td>
<td>9%</td>
</tr>
<tr>
<td>Latino or Hispanic</td>
<td>35%</td>
<td>7%</td>
</tr>
<tr>
<td>African American</td>
<td>38%</td>
<td>13%</td>
</tr>
</tbody>
</table>

*Source: [http://dqcde.ca.gov/dataquest/](http://dqcde.ca.gov/dataquest/)
*Last year of drop out data prior to Linked Learning implementation
Building Capacity and Ownership across the District

For Linked Learning to thrive across the district, Superintendent Diaz knew that, ultimately, the district would need to take a far more collaborative approach than it had in the past. Collaboration would include capacity-building efforts within the central office as well as at school sites to help stakeholders better understand and be able to support the various components of Linked Learning, to provide policy support, and to ultimately build a system of high-quality pathways. In addition, in order to ensure that Linked Learning could truly sustain and thrive as the primary reform model for PUSD high schools, district leaders acknowledged the need to build a sense of ownership of Linked Learning beyond a few champions. Superintendent Diaz asserted that, in a heavily directive system, meaningful change is very difficult to sustain, noting.

Table 5: Academic Performance Index for John Muir High School (2008-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Muir Overall</th>
<th>Black or African American</th>
<th>Hispanic or Latino</th>
<th>Socioeconomically Disadvantaged</th>
<th>English Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008*</td>
<td>600</td>
<td>606</td>
<td>586</td>
<td>596</td>
<td>555</td>
</tr>
<tr>
<td>2009</td>
<td>610</td>
<td>611</td>
<td>601</td>
<td>608</td>
<td>557</td>
</tr>
<tr>
<td>2010</td>
<td>631</td>
<td>634</td>
<td>625</td>
<td>614</td>
<td>580</td>
</tr>
</tbody>
</table>

Source: api.cde.ca.gov/reports/API
*Last year of API data prior to Linked Learning implementation

Table 6: Timeline of Linked Learning Pathway Expansion in PUSD

<table>
<thead>
<tr>
<th>School Year</th>
<th>Linked Learning Pathway Initial Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008–09</td>
<td>John Muir High School</td>
</tr>
<tr>
<td></td>
<td>• Business and Entrepreneurship Academy (10th-12th grade)</td>
</tr>
<tr>
<td></td>
<td>• Engineering and Environmental Sciences Academy (10th-12th grade)</td>
</tr>
<tr>
<td></td>
<td>• Arts, Entertainment, and Media Academy (10th-12th grade)</td>
</tr>
<tr>
<td>2009–10</td>
<td>Blair High School</td>
</tr>
<tr>
<td></td>
<td>• Health Careers Academy (10th-12th grade)</td>
</tr>
<tr>
<td></td>
<td>• Creative Arts, Media, and Design Pathway (10th-12th grade)</td>
</tr>
<tr>
<td></td>
<td>Pasadena High School</td>
</tr>
<tr>
<td></td>
<td>• Creative Arts, Media, and Design Pathway (10th-12th grade)</td>
</tr>
<tr>
<td></td>
<td>Marshall High School</td>
</tr>
<tr>
<td></td>
<td>• Information Technology Pathway (10th-12th grade)</td>
</tr>
<tr>
<td>2010–11</td>
<td>Pathways above implemented in 9th grade</td>
</tr>
<tr>
<td>2011–12</td>
<td>Blair High School</td>
</tr>
<tr>
<td></td>
<td>• Culinary Arts and Hospitality Pathway (9th-10th grade)</td>
</tr>
<tr>
<td>2012–13</td>
<td>Pasadena High School</td>
</tr>
<tr>
<td>(projected)</td>
<td>• Law and Public Service Pathway (9th-10th grade)</td>
</tr>
</tbody>
</table>

Source: api.cde.ca.gov/reports/API
*Last year of API data prior to Linked Learning implementation
If reform is implemented through a directive approach, and subsequently turnover in leadership occurs, people will just sit back and wait for the new direction.

During the first few years of implementation, district leaders focused their efforts to build capacity and ownership across the district through a few essential areas:

- Distributing leadership across the central office,
- Building central office capacity to collaborate with pathways,
- Building site capacity to address pathway quality,
- Providing responsive support to pathway leaders,
- Funding Linked Learning.

### Distributing Leadership across the Central Office

Central to PUSD’s strategy for creating a system of pathways is an increased focus on distributive leadership. For the first few years of planning and implementation, Superintendent Diaz 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 would meet 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.

One of the challenges that surfaced during the first few years of implementation was expanding leadership for Linked Learning across other parts of the central office. Superintendent Diaz maintained a very active role with Linked Learning, both internally as well as within the larger community. However, the core Linked Learning team voiced the need to develop broader leadership and a shared vision for Linked Learning across the central office to include cabinet members and other department leaders. One team member observed during the first year of implementation, “Linked Learning is at one end of the hallway, but not yet systemic among everyone in the district office.” In order to close this gap, two key strategies were utilized:

**Facilitated sessions with cabinet and other district leaders.** With the support of the ConnectEd district leadership coach, 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.

**District Leadership Development Series.** This series of district-hosted residencies and learning institutes, led by the SCOPE and ConnectEd, has been central to the California Linked Learning District Initiative. The pathways core team, including the superintendent, regularly attend these professional development sessions, as do other central office staff, including the coordinator of staff development, the chief academic officer, the chief human resources officer, and the coordinator of professional development.

**Building Central Office Capacity to Collaborate with Pathways**
In addition to distributing leadership for Linked Learning across the central office, Superintendent Diaz and other members of the pathways core team recognized that if they were going to make any substantial headway at school sites, they were going to need to change the way the central office interacted with these sites. One of the lessons learned from the early stages of implementing Linked Learning was that the initiative was largely directed by the district. For example, the reform at John Muir High School took place by district directive and came with a set of non-negotiable conditions. During the 2009-10 school year, however, this directive approach was balanced with deeper col-
laboration and communication with school sites. Collaboration was increased through the following strategies:

**Collaborative and facilitative leadership training for central office leaders:** District leaders recognized that they needed professional development in order to work with school sites in a way that balanced the previously predominant method of directive leadership. During the 2010-2011 school year, wanting to provide a more collaborative approach in supporting the continuous improvement of pathways, 75 district leaders, including both certificated and classified administrators, received six sessions of formal training in facilitative leadership. This included initial professional development led by an outside consultant, Interaction Associates, with subsequent sessions led internally by a set of district leaders. The training focused on seven leadership practices that “provide a framework for improving the effectiveness of team, project, and organizational leaders.” These include:

1. Spark enthusiasm and productivity with an inspiring vision.
2. Focus on the work process, group relationships, and business results for multidimensional success.
3. Involve employees appropriately, creating employee ownership of strategies, tactics, and results.
4. Design powerful Pathways to Action to help change initiatives succeed.
5. Facilitate agreement among involved stakeholders for smoother implementation.
6. Coach those you lead for better performance and deeper commitment.
7. Celebrate success and accomplishment to create a satisfying work environment.

Pathways were among the beneficiaries of this increased capacity of district leaders. With increased facilitation tools, district leaders were able to play a more active role in helping pathway leadership teams to create a shared vision, come to agreements on essential issues, reflect on pathway quality, build participation of key stakeholders, and create action plans.

A pathway teacher-leader recalled experiencing the difference that the facilitative training had on their two-week district-led summer professional development for pathways. She said the approach used by the two district officials who managed the event “was extremely collaborative, reflective, and allowed for all voices to be heard.”

**Pathway walk-throughs:** To further increase the capacity of the central office to support pathways, in December 2010, all executive team members were required by the superintendent to participate in a formal site visitation to at least one of the six pathways
— resulting in visits to nearly every classroom within each of six pathways. This increased the visibility of district administrators and facilitated future interaction between district and site leaders. Superintendent Diaz stated, “I wanted others in the district office to make connections for themselves because I felt we were talking about pathways, but we weren’t, as a leadership team, living pathways.”

These visits led to a stronger collective understanding of Linked Learning. In reference to the impact of the pathway walk-through, one senior executive recalled:

> 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.

One cabinet leader returned with more than just a better understanding. He quickly worked with his department to partner with the Muir High School Business and Entrepreneurship Academy so that they could directly support students. He and his team hosted student interns for a summer and developed a shadow day for students from that pathway to the district central office so they could experience how the district, as a business, operates.

### Building Site Capacity to Address Pathway Quality

With many central office leaders ready to play a facilitative leadership role, the district Linked Learning team has focused on supporting deeper ownership of Linked Learning implementation at the site and pathway level. For some pathways this has included an increased role of district leaders at pathway meetings to help staff to understand both the “what” and the “why” behind Linked Learning.

For pathways that were ready, the district worked on increasing the capacity of site and pathway leaders to understand and reflect on indicators of pathway quality and, ultimately, to take action. Strategic actions taken by the district to increase the capacity of site and pathway leaders included structured support during the pathway certification process as well as continued capacity building through the Pathway Leadership Series, facilitated by ConnectEd.

**Pathway certification support:** Using the Certification Criteria for Linked Learning Pathways as a framework for pathway quality, district leaders have supported pathway leaders to reflect, build collective vision, and engage in strategic thinking around implications for their community. One example is a full day session, called a “Deep Dive,” during which district leaders guide pathway leaders and staff to collectively engage around and reflect on pathway quality. By using criteria and tools provided by the district team, pathway staff members are able to review their progress toward certification and to articulate professional development needs directly to district leaders.
One pathway teacher leader commented on the benefits of these forums:

We saw that we need work using data, interventions we could build on, and our advisory board, so it’s been a great process as far as looking at our own program and seeing where our weaknesses are, and also celebrating the strengths that we’ve had.

During a different Deep Dive, a district leader recalls nudging a pathway team in a “non-threatening manner” to review the goals and outcomes of the sequence of classes offered in that pathway. During this honest reflection, one of the counselors declared, “This is really too low of a level. When I meet with parents, I can’t show them this because they’ll say, ‘This isn’t for my kid.’” Pathway teachers themselves started to realize that the class goals needed to be set at a higher level, and the Deep Dive process allowed that to come from them.

**Pathway Leadership Series:** Another significant mechanism used by PUSD district leaders to build site capacity has been the Pathway Leadership Series. Facilitated by ConnectEd and supporting teams from all nine districts participating in the California Linked Learning District Initiative, this professional development sequence has focused on essential components of Linked Learning (e.g., programs of study, master schedule, integrated curriculum, authentic assessment). To ensure strategic use of these sessions, PUSD district leaders selected leaders from pathways that were initially pursuing certification to participate in this professional development series. Members of the district Linked Learning leadership team would join pathway leadership teams at each event and follow up with them to provide ongoing support.

**Providing Responsive Support to Pathways**

With increased transparency between district and site leaders, support and professional development has been much more responsive to the needs of school-site personnel charged with implementing Linked Learning. One member of the Linked Learning District Leadership team commented about district-led professional development. “It was really teacher-driven. We asked for what they needed and listened.” During the first few years of implementation of Linked Learning, the PUSD central office targeted support in the following areas (aligned with the certification criteria):

**Supporting curriculum and instruction:** Teacher leaders cited the district-sponsored summer professional development series led by an external consultant, which focused on integrated curriculum, as a strong example of the district responding to needs expressed by teacher leaders. As one leader recalls:

We had time to look at some research-based information that addressed the hows and whys, and then had plenty of time to work on making our projects/information our own…. The work was guided, but yet there was a tremendous amount of flexibility to do what we felt best as a team.
During summer professional development, with the facilitative approach from district leadership and technical assistance from an outside consultant, one team reported they were able to “develop pathway outcomes, plan the internal and external pieces of our integrated projects, collaborate with our advisory board, and calendar events for the school year.” Further reflecting on the benefits of the summer work, one pathway teacher leader said, “The fact that we’ve got our projects off the ground is huge.” One such project was “The Business of Your Life” — a 9th/10th-grade integrated project in the Business and Entrepreneurship Pathway at Muir High School. This project used a core assignment for students to envision their life in 10 years and integrated several subjects into the curriculum. Students explored potential careers, planned personal and family finances and budgets, and conducted research and interviews. Students presented their final products in a showcase to an audience that included school staff, 11th and 12th graders, parents, and industry partners.

Establishing principal leadership: While supporting whole pathway teams to implement Linked Learning, district leaders also acknowledged that principals played a critical role in leading the effort. In reference to the principal’s role in Linked Learning, one district cabinet-level leader noted, “If someone does not see the vision, it’s very hard to move the schools.” In some cases, district officials replaced principals who lacked commitment to Linked Learning with those that would champion it as a central priority.

Principal leadership in the reform effort was also identified as a key strategy in expanding stakeholders and making reform less reliant on central office leadership. As one principal noted, referring to significant staff transitions taking place in the central office, “There’s a changing of the guard going on, you know. And so, in order for this program to successfully, systemically stay alive, it has to become my priority. It has to be my mission — my personal mission.”

Protecting human resources: In addition to ensuring that the principals were on board with Linked Learning, district leaders worked to challenge a long-standing staffing policy that hindered the growth and development of the pathways. This “Last-In, First Out” policy was enshrined in the Education Code and the teachers’ collective bargaining agreement and was a major barrier to pathway development. Without any special protections in place, many teachers who were dedicated to the pathway communities would be laid off while teachers with less investment in pathways might be protected because they had more seniority with the district. This policy had a particularly traumatic effect at John Muir High School. Many of the teachers who had initially been chosen to be part at Muir during the reconstitution phase and to be part of one of the pathways lost their jobs in 2008 and were replaced by veteran teachers from traditional high schools with significant resistance to the Linked Learning model. One district leader surmised that the significant investment in professional development for pathway teachers in 2007-08 was largely wasted due to teacher turnover. Losing essential pathway teachers caused major limitations around continuity and capacity building.
In response, citing the special qualifications of pathway teachers, Superintendent Diaz directed the Human Resources department to establish revised “skipping criteria” so that pathway teachers were protected or “skipped” during the reduction-in-force process. This policy, which was officially adopted by the Pasadena Board of Education, was challenged later in an administrative hearing by the California Teachers Association (CTA). However, arguing that pathways are a “specialized program” and that the district had made a major investment in professional development of pathway teachers, the district prevailed and the establishment of the skipping criteria for Linked Learning was upheld. According to the actual resolution passed by the Board of Education, teachers must be:

- Currently assigned to a teaching position in the Pasadena Unified School District, have participated in college and career pathway training for a minimum of 25 hours over the past 3 years, and have knowledge of the strategies that integrate work-based lesson development implementation.... Pathway teachers must [also] meet the district’s obligations under NCLB criteria and further support the Pasadena High School Graduation Initiative.15

One member of the district’s Linked Learning leadership team noted:

The building in of the skipping criteria for layoffs shows tremendous commitment. And I think especially at a place like Muir where they have a disproportionate number of new teachers on that staff and the
turnover at that staff making it hard to sustain something over time and really build a community. I think that really has the potential to make a difference.

**Funding Linked Learning**

This expansion of Linked Learning as a core part of the district’s strategic plan has continued to be evident over the past 3 years, despite the district having to cut more than $32 million from its budget. This required difficult decisions to eliminate other important areas of work. However, Superintendent Diaz reports, “As we developed budget priorities, secondary reform became the number one priority of the district. Linked Learning was identified as the strategy to address that priority.” Prioritizing Linked Learning meant protecting teacher staffing, administrative support, and professional development dollars.

**Expanding Ownership into the Community**

USD district leadership has taken deliberate steps to build capacity, support continuous improvement, and ultimately develop ownership of the initiative among central office leadership as well as administrators, teachers, and other leaders at the school site and pathway levels. Similarly, the district has worked to develop a broader sense of ownership of the initiative beyond school sites, within the community, and with external partners. This includes families, school board members, civic leaders, industry partners (e.g., advisory board members and other professional persons or organizations), post-secondary educational institutions, and other community partners.

Building a broader ownership base for Linked Learning throughout the greater community serves multiple purposes. At the community level, developing ownership for the pathways among the larger municipal area works toward healing the old wounds between the school district and the community. At the pathway level, developing a large and deep base of external industry partners contributes to the development of high-quality pathways that are aligned with workforce expectations and provide rich curriculum experiences for students, including work-based learning. Expanding ownership into the community is also about the long-term growth and sustainability of Linked Learning as the district’s central reform measure for secondary education.

Efforts to expand ownership of Linked Learning across the community have focused on the following areas:

- Disseminating information
- Fostering meaningful community and industry involvement in pathways
- Maintaining meaningful relationships
- Building toward broader community investment
Disseminating Information
Communication on Linked Learning has been central to the district’s strategy for building ownership among the various stakeholder groups. Primary examples of this effort include marketing and branding as well as community outreach.

Marketing and branding. In 2011, PUSD increased its efforts to market and brand its pathways. Central to this effort was the design and distribution of 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. As Superintendent Diaz recalled:

I was absolutely amazed at the role the marketing materials can have in bringing coherence and understanding about Linked Learning. When the Coalition for Great Schools reviewed the pamphlets, they immediately offered, “You’ve got a story… look at these pictures.” It immediately moved their understanding of the effort forward, and it happens with a lot of individuals that we provide these marketing materials to.

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.”

As part of the marketing strategy, these materials are stored and transported in sleek silver suitcases that are available as part of any outreach effort. The official suitcases have not only proved useful in disseminating information about Linked Learning among external community members, they have been helpful in generating excitement among students and parents. During a recent recruitment event, one pathway teacher-leader recalls hearing from many parents how impressed they were with the materials across pathways. She added that students who were at the event as ambassadors of their pathway felt a sense of pride and professionalism handing out business cards and fliers about their pathway.

Community outreach. The effort to disseminate information and build awareness across the community has involved district and community leaders, notably Superintendent Diaz, whose outreach included numerous speaking engagements in public forums. “His ability to build relationships and articulate his vision was essential to the foundation he left for a broad-based coalition and community support of Linked Learning,” one district leader said.

In addition, members of the Linked Learning district leadership team and other central
office leaders have organized and attended social events to share information and develop relationships with community and industry leaders. These include open-house style events at pathway sites for community leaders. Among the invitees have been members of the local chamber of commerce, local industry leaders, city council members, members of the College Board, board of education delegates, state senators and assembly members, and congressional representatives. Events include walkthroughs of the pathways and an opportunity to interact directly with the students. School-site leaders (i.e., pathway leaders and principals) have also reached out to community and industry members, hosting mixers or scheduling personal meetings.

While district team members and school leaders remain the major recruiters for pathways, one of the district's strategies for building a more formal broad-based coalition has been to collaborate with key leaders in the community. Among them is Pasadena Mayor Bill Bogaard, who has played an essential role in building the credibility of the school district and, more specifically, of the Linked Learning Initiative. Bogaard advocated for Linked Learning at a 2010 Pasadena Business and Education summit and more recently spoke at a PUSD Board of Education meeting to support the district's commitment to Linked Learning.

John Muir High School students
The PUSD school board also has made significant strides towards presenting a collective agreement on owning and promoting the initiative to community members. While school board members still do not always march in lock-step with each other, they have grown to be Linked Learning ambassadors, connecting pathways with community members, local government agencies, and businesses.

Finally, one of the major partners of PUSD, the Pasadena Educational Foundation (PEF) has been instrumental in spreading the word about Linked Learning. An independent non-profit, PEF aligns its goals with PUSD and then works with the district to raise funds to bring vital and innovative programs and resources PUSD students. Increasingly aligning their work with Linked Learning, PEF has significantly helped the district in developing deeper relationships with industry partners by funding two full-time Linked Learning business liaisons.

**Fostering Meaningful Community and Industry Involvement in Pathways**

Having generated community and industry interest in Linked Learning through outreach and dissemination, district and pathway leaders then focused on developing their involvement within pathways. The continuum of partner involvement includes:

- **Pathway activity level:** At this beginning programmatic level, as one of the district’s business liaisons reports, are “partners who want to come in and do mentoring or after-school tutoring.” In addition, industry and community partners can provide guest speakers, host field trips to places like Junior Achievement of Southern California’s Finance Park, or provide support for an integrated project.

- **Pathway advisory level:** Some businesses have become more deeply involved with individual pathway advisory boards and fundraising efforts. This has led to a stronger sense of pathway ownership for these industry partners. One example is at John Muir High School where the Business and Entrepreneurship Academy has developed an advisory group that has served as a model for others in the district. Chaired by an industry leader, this advisory group uses school data to identify specific areas of need. For example, data showed that African American males in this pathway were participating in internships at a very low rate so the advisory group developed an intervention strategy that brought in industry partners to mentor ninth graders, with the intention of building relationships with students and increasing the participation of high-needs students. Other challenges taken on by this advisory group include sponsoring a Dress for Success fundraiser to help provide students with professional attire for the workplace. The
advisory group also supported the pathway’s adoption of the National Academy Foundation Business and Finance curriculum to ratchet up the rigor of business courses.

• **Pathway structural level**: Some 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. Pasadena Community College is working with PUSD to create additional career-aligned pathways for students.

### Maintaining Meaningful Partnerships

Getting the word out about the pathways and establishing various tiers for participation for potential new partners alone is not enough to ensure robust, sustainable pathways. “It’s one thing,” explains a school board member, “to sort of have some tangential relationship, it’s another to really involve people in a deep and sustained, meaningful way.” To develop meaningful involvement requires closely directing partnerships and, explains a site administrator, “making sure at the school site we can make things easy for business partners and … help them add value to what kids are learning in a way they recognize.”

Tailoring the pathway experience both for students *and* for partners has been a slow process, taking substantial time and work. One district leader noted that the collaborative and facilitative leadership skills used by district leaders with pathway staff were also being applied to engage the broader community. The business liaisons hired through the Pasadena Educational Foundation have been central to maintaining and deepening these often-complex partnerships. When discussing the rationale for creating these positions, a school board member explained:

> Not only did we need to put some people in place to actually deal with the partnership connections, we had to make sure that from a systems level, the whole district was ready to engage in partnerships…. We needed to ensure that someone was in charge of developing those partnerships, of communicating to the larger community that this was a major initiative and here are the different ways in which you can connect.

Beyond initiating communication with partners, business liaisons have provided a deeper support role for pathways, cultivating work-based learning opportunities for students and deeper, constructive relationships with industry partners. One pathway
teacher leader spoke to how much one of the business liaisons has contributed to their pathway:

She is able to connect and follow-up with business partners in a way that I never could while still being in the classroom. She’s established a protocol for students who participate in work-based learning experiences and every experience is connected back to the course in some way.

During the 2010-11 school year, PUSD officials began to track work-based learning activities for pathways — activities that resulted from community and business partnerships (see Table 7, below). This data does not necessarily represent every work-based learning activity. However, one district leader reports that this is a “substantial increase in activity compared to previous years.”

### Building Toward Broader Community Investment

In addition to working to upgrade and sustain both the quantity and quality of partnerships between industry and pathways, PUSD has put substantial effort into building broader community ownership and aligning community efforts to support a high quality, sustainable system of pathways. While an increasing numbers of partners are investing directly into individual pathways, there is also, as one of the business liaisons explains, “this other tier of leadership” where business and community leaders “help sustain this program in the future and really have it identified as a partner-driven initiative as opposed to a district-driven initiative.” This has created opportunities for community input about critical elements of Linked Learning, conscious efforts to align community efforts around a collective vision for students, and the development of formal coalitions to drive this work on behalf of the district and the broader community.

### Community Input:

As previously mentioned, community and industry partners have provided essential input for the reconstitution plan at Muir High School. The district has also looked to the community for input around the larger strategic plan and goals related to Linked Learning through regular focus groups. One of the most notable examples of community and industry input is in the process to

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<th>Activity</th>
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<td>17 guest speakers</td>
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<tr>
<td>23 field trips</td>
<td>866</td>
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<td>89</td>
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<td>12 teacher externships</td>
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Source: (T. Sippel, personal communication, December 19, 2011)
develop a PUSD graduate profile. This comprehensive planning process featured contributions from more than 800 stakeholders, including students, teachers, parents, industry partners, higher education officials, and many other community partners. One example was a formal business summit during which partners had the opportunity to articulate the skills and attributes the community wanted out of a PUSD graduate. This has helped build collective ownership of the pathway process while increasing the focus on student outcomes. A key goal for the graduate profile is that it is understood and supported across the district and community and, ultimately, serves to galvanize community participation.

**Formal Coalitions:** While district and pathway personnel are charged with most of the day-to-day implementation of Linked Learning, PUSD has worked toward establishing two formal coalitions to guide the growth and sustainability of Linked Learning:

- **Council of Chairs:** This broad-based coalition is made up of the advisory board chairs across all district pathways. This group has existed and been involved with PUSD academies for many years. However, over the last year, explained a district team member, “they have taken their role to another level.” Before the Linked Learning initiative, he explained, often they would assemble merely to hear reports. But recently the council has engaged around pathway quality, district systems, and Linked Learning language. As a result their capacity to lead the initiative has increased.

- **Blue Ribbon Committee:** Growing out of an ongoing conversation with Mayor Bogaard, Superintendent Diaz, and a few Pasadena CEOs, this group was originally envisioned as a group of 11-15 CEOs who would provide corporate sustainability and give voice to the pathway initiative. However, due to the leadership transition at the district level, civic and industry leaders already associated with the development of this committee decided to delay a formal pitch to the targeted CEOs.

**Emerging Impact and Continued Challenges**

**Building a Collaborative District Culture**

Both central office and site leaders acknowledge that, overall, a positive shift in district culture has occurred during the initial stages of implementing Linked Learning. The spirit of collaboration, championed by Superintendent Diaz, has manifested within different facets of the central office, and includes stronger bridges between the Linked Learning team and cabinet-level leaders. With growing capacity for facilitative leadership and increasing opportunities for collaboration with site leaders, district leaders are modeling the collaborative practices that will support a continued culture shift across the district.
School and pathway site leaders appear to confirm that this shift in the central office culture has helped lead to a relationship between the district and school sites that is characterized more by trust and support than conflict. Cultural shifts include both the increased visibility of central office personnel at school sites and a more collaborative and facilitative approach with sites and pathways. One site leader indicated that the district has been more “hands on” than in the past, but that this primarily has been experienced as support and collective accountability instead of simply compliance. One district leader reflected on how strategies such as the Deep Dive are illustrative of the broader cultural shift throughout the entire district:

This district has had a culture of things being done for compliance, not because it’s good for kids, not because it’s good instruction. It’s been more about, “We’re doing things because we’ve been told we have to.” Or somebody coming in and saying, “This is the way you’re going to do it.” And I think one of the positive things about the Deep Dive is that we don’t tell them how to do it... they identify [the needs] themselves: “This is our strength. Well, we’re almost there. If we did this, we could get here. This is where we’ve got a gap and we’ve got to come up with a plan.” But we don’t tell them how to do it. We’ll support them, we’ll provide resources, but it really has to be done by them, because it won’t stick without it.

Increased transparency about the vision for Linked Learning as the major reform priority for high schools has also deepened the trust between site leaders and the district. The increasingly clear focus and consistent messaging has helped teachers, principals, and other site personnel to trust that Linked Learning is not merely a passing fad, but a worthwhile investment in their time and energy. Similarly, as the district has provided professional development opportunities and other avenues to build capacity at the site level, as one site leader said, the district is “putting their money where their mouth is.” These experiences have built confidence that the district will continue to support this work and that Linked Learning is here to stay.

Although the traditional us-vs.-them mentality has subsided, there still remain challenges that need to be addressed in order to build more constructive working relationships with all pathways. One district leader acknowledged the need to continue building trust with pathways as they continue to express ambivalence with district intentions. This may be particularly important for newer pathways that have not received the same level of district support as John Muir High School, the original pilot for Linked Learning. This lingering tension was evidenced by one pathway teacher leader who, while acknowledging that the district has articulated a more cohesive vision for Linked Learning and a more “facilitative” approach in district leadership, expressed frustration with what she still perceived as a “significant focus on compliance.”
One of the other major shifts in district culture is how principals and pathway leaders have taken the reins for this initiative. While some still require additional support from the district, others have become champions of what began as a district-initiated reform. Interestingly, as transition of district leadership began following the 2009-10 school year, other leaders had the opportunity to step up to fill some of the gaps for implementation of Linked Learning. One district administrator observed, “We ended up depending on principals more. Sometimes when you have a strong person centrally, their style can inhibit site leadership. Because we did not have that central person, it gave principals more opportunity to grow.” One example of this increased principal leadership for Linked Learning has been the increased visibility of principals at PUSD Board of Education meetings, who lead updates on Linked Learning. This was a role previously held almost exclusively by district leaders.

Respondents indicated that many of the pathway leaders have grown as well. However, there was concern about the capacity for pathway leaders to take on the responsibility required to move the work forward. As career academies have evolved into full pathways, there has been increased demand on pathway leaders. One district leader cautioned against setting up leaders for burnout and failure because of the additional responsibility, saying it’s “just way too much to ask a lead teacher to both be developing curriculum, teaching, managing a small learning community, and in charge of all the partnerships that would support this work.” There is a defined need, he continued, for “some sort of centralized infrastructure to really support those lead teachers and the actual programs.”

Students and staff from John Muir High School during a visit to the Avery Research Lab in Pasadena.
One of the tensions that has surfaced for principals and pathway leaders relates to the level of autonomy they have at their respective sites or pathways. While pathways have gained considerable autonomy around key Linked Learning components (e.g., program of study, master schedule, integrated projects, systems of student supports), tensions remain around district versus pathway expectations regarding implementation of Linked Learning. For example, one site leader pointed out that pathway teams were experiencing frustration around implementation of district curriculum pacing guides and benchmark assessments. They have not been updated to reflect teaching and learning goals associated with Linked Learning. A district leader also expressed frustration related to this topic, expressing concern that pathways were not incorporating district benchmark assessments into Linked Learning lesson plans. Suggesting these pathways would thus be ill-prepared for state testing, this same district leader warned, “When we get measured… it’s going to reflect on the pathways.”

Both district and pathway leaders agreed that there remains a level of disconnect between district and pathway expectations. One pathway leader expressed this as a gap between vision and implementation. She commented, “We feel that the district vision is strong and very idealistic, but there are times that this vision is difficult to implement at the school site within the day-to-day functioning of the program. The ideal vision does not always align with what is possible to achieve.” Further contributing to this gap seem to be questions around whether pathway teachers are required to attend district-led professional development. While acknowledging that these sessions are beneficial, many pathway teachers also perceive that these have been treated as optional, that individual teachers have had the choice to attend or not attend. This has been identified as a significant obstacle to building coherence and capacity in a pathway program.

One district leader praised forums like the Deep Dive to help address this disconnect between the district and pathways. However, he expressed concern around the lack of follow up with pathway teams to support further implementation and a continuous cycle of improvement.

**Building Credibility in the Community**

PUSD has made tremendous progress in both the quality and quantity of partnerships with business, civic, and community partners. Superintendent Diaz explained, “We’ve expanded the partners, but our industry partners who have been around for a while are really involved at a much deeper level.”

“A handful of partners,” a business liaison agreed, “have gotten involved in a deeper, more meaningful ways.” These business leaders are partners in the true sense of the word — their contributions are not simply “add-ons,” but are integrated and essential to the pathway experience.
Along with partnerships with pathways, the school district continues to work hard to repair what has been an historic fissure and build up what one community member refers to as “the credibility of the school district in the eyes of the community.”

Building strong partnerships grounded in trust takes effort in any partnership situation and in Pasadena this challenge may be even more demanding due to the historical dis-connect between the school district and the community. Superintendent Diaz explains, “It has been a process of being visible, establishing credibility by demonstrating progress over time. Once you have credibility, maintaining a relationship still needs a lot of managing and caretaking.”

Much of the increased credibility of the district has been attributed to positive feelings about Linked Learning. The initiative has “had very broad support both among board members and within the community,” explains a school board member. Another respondent reiterated how the community has begun to rally around Linked Learning as a major part of the district’s vision. “The average business owner gets this. The average community member and voter get that there ought to be a real connection to business and industry and our schools.”

Several pathway and district personnel reported that there has been a change in the long-held negative perceptions of community members and leaders about the district.

John Muir High School students build a solar boat.
One of the interview participants described how this shift in sentiment was very publicly visible:

We’ve had everything from mayoral races in which it was a contest to see who could bash the school district the most to the situation which we have now where in this last council election, the candidates literally were falling all over themselves to talk about how they were going to support public schools. So we’ve seen a real sea change.

While community sentiment has seemed to shift in a very positive way, eradicating long-held perceptions continues to prove difficult at an individual site like Muir High School, even with clear signs of positive transformation such as the substantial decreases in drop-out rates and increases in test scores. Site administrators report that parents increasingly acknowledge the benefits of Linked Learning for students, but there is still a long way to go to address many parents’ negative perceptions of the school.

A Muir administrator described an interaction with a prospective parent in which the parent described her initial associations of Muir High School, based purely on rumors, as a site with “gang warfare” and “violent kids.” One site administrator claims that this perception is reinforced as the media consistently portrays Muir High School in an overly negative light. After a recent student conflict at the school, the media chose to portray this as “more of the same.” These perceptions overshadow Muir’s tremendous transformation and success since the inception of Linked Learning.

**Sustaining Linked Learning**

Clearly, the Pasadena Linked Learning initiative has made significant strides during the past couple of years. However, while the outgoing superintendent, Linked Learning district team, and other district leaders have taken deliberate steps to build Linked Learning into the culture and fabric of PUSD as well as the broader community, there still remain questions around how much it will be supported under a new administration. Both district and pathway leaders voiced strong concerns about the stability of Linked Learning during the leadership transition. As one pathway teacher leader observed, while they have made tremendous progress, successful development in Linked Learning is still susceptible to changes at the district level. She says, “It’s such a work in progress that to change anything at this point can change everything.” When asked about the future of Linked Learning after the transition, one district administrator remarked, “I don’t think that we’ve been here long enough to make sure that every seedling has the roots it needs.” “Internally,” a Linked Learning district team member explained, “it’s definitely a house of cards.”

At the same time, there is also strong sentiment that Linked Learning clearly has gained momentum in the community, setting the foundation for deeper ownership and sustainability of the initiative. In March of 2011, Superintendent Diaz noted, “The community
is at a tipping point where there is enough involvement and relationships established that, potentially, the community will be a voice for the initiative and continue to move it forward.”

Diaz was not the only district personnel who expressed this opinion. For example, when talking about the new superintendent hire, a school-site administrator said, “If the new superintendent talks to the staff and the community, he'll see the momentum is there, and that it really is good for kids.”

The board also has taken pragmatic steps to ensure that the initiative is institutionalized throughout various district systems. Because of their efforts, Linked Learning is now infused into the district’s strategic plan as well as considered in plans for facilities and curriculum development. To ensure continuity with and commitment to Linked Learning during and after the district leadership transition, the board officially re-endorsed Linked Learning in April 2011 and strongly considered candidates’ experience with and support for Linked Learning as important criteria for the newly hired superintendent.

The increased investment by industry and other community partners, however, may be the clearest evidence that PUSD’s efforts to build a broader support base for its Linked Learning pathways are having an impact. This is evidenced both in the quantity of partners that have come on board as well as the deeper level of investment by partners. This increased sense of stability and sustainability is being felt across the district. A school-site administrator describes how he understands the situation:

When you get the business community married to the program, it can sustain…. What we’re truly creating here is political clout to keep Pasadena’s pathway[s] alive, flourishing, and functioning regardless of whether there’s Irvine Foundation money or not. It’s come to the point where it’s in our master schedule and it works. It’s part of our DNA, and there’s no going back anymore. This is not going to be a program that’s just going away, this is a program that has sustained growth.
Appendix A: Data Log

Data were collected from the Pasadena Unified School District in the form of interviews, observations, and artifact reviews. The follow data were collected between September 2009 and September 2011.

Interviews
• Interviews with superintendent (April 2010; April 2011; September 2011)
• Interview with chief academic officer (April, 2011)
• Interviews with Linked Learning District Leadership Team (April 2010, April 2011)
• Separate interviews with three individual members of Linked Learning District Leadership team (April 2011)
• Interview with three high school administrators (April 2011)
• Interview with two pathway lead teachers (representing two separate pathways) (April 2011)
• Interview with one school board representative (April 2011)

Observations
• Observations of district leadership practices within district context:
  ~ Principals’ meeting (September 2009)
  ~ Linked Learning District Leadership team planning meetings (April 2010)
  ~ Business and Education Summit (February 2010)
  ~ Community engagement meeting (April 2010)
• Classroom observations (April 2010 and April 2011)

Artifacts
• Review of district leadership plans/related artifacts
  ~ Implementation plan
  ~ Interim progress reports
  ~ Planning documents from district leadership series
  ~ District self-assessment
Endnotes


3. The Census reports whether Hispanic or Latino separately from race. We counted people who declared themselves Hispanic or Latino and a race other than “multiple races” in the Hispanic or Latino category and not in their other racial category.


5. The API is a single number, ranging from a low of 200 to a high of 1000, which reflects a school’s, a local education agency’s, or a subgroup’s performance level, based on the results of statewide testing in California. The state average for high schools in 2007 was 689.


7. Linked Learning was known as “multiple pathways” when it was originally implemented.


10. Figures represent the “Adjusted 9-12 4-year Derived Dropout Rate”


13. ConnectEd, in partnership with the Career Academy Support Network (CASN), the Education Trust-West, the National Academy Foundation (NAF), and the National Career Academy Coalition (NCAC) have developed the Certification Criteria for Linked Learning Pathways, a set of common standards to help determine if pathways are likely to improve student achievement. Categories include pathway design, engaged learning, system support, and data and impact. Additional information about the criteria and the process through which a pathway can earn “certification” can be found at http://www.connectedcalifornia.org/schools_districts/certification

