

Meeting 40 Summary
Pursuing Rigor, Relevance, and Equity:
Student Pathways in San Bernardino

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***Note:** This meeting summary was developed as a resource for members of the California Collaborative on District Reform. We are making this document publicly available in an effort to share the work of the Collaborative more broadly to inform the dialogue and decisions of educators throughout the state. This summary does not, however, contain the background and contextual information that might otherwise accompany a product created for the general public. For more information about the meeting and other Collaborative activities, please visit www.cacollaborative.org.*

The California Collaborative on District Reform has periodically explored the connections between the classroom and the workforce over time. These explorations include a November 2011 meeting that examined Linked Learning in Long Beach high schools, a March 2012 convening that unpacked the alignment between K–12 education and labor market demands, and a March 2017 meeting that considered collective impact strategies as a means of uniting a community in the service of shared goals. The 40th meeting of the Collaborative brought these threads together for two days of discussion about student pathways in San Bernardino City Unified School District (SBCUSD). Participants interacted with a range of SBCUSD partners to explore the motivation for and promise of pathways work, the nature of learning opportunities in the workplace and the classroom, attention to equity in the design and implementation of pathways, and efforts to monitor progress over time.

Why Pathways?

The term *student pathway* refers to an academic program—typically at the secondary level—that aligns coursework under a broader theme and provides access to both rigorous academics and learning opportunities embedded in the workplace. In contrast to traditional approaches to high school course sequencing, which often reserve career exposure for vocational education programs and separate students into a “college track” or “working track,” pathways seek to provide high-quality learning experiences that prepare all students for both college and career. The Linked Learning approach to pathways seeks to define the parameters of a high-quality learning experience by promoting four components of the high school experience: rigorous academics, career technical education,

¹ Thanks to Jarah Blum, Marina Castro, Linda Choi, and Kathleen Jones for taking careful notes during the meeting and thus making this summary possible.

work-based learning, and comprehensive support services.² A certification system from the Linked Learning Alliance assesses the quality of a pathway program: the Silver certification verifies that the core components of a Linked Learning pathway have been established, and the Gold certification affirms the quality of implementation, as well as the availability of equitable opportunities for all students.

In SBCUSD, pathways have increasingly come to define the district’s conceptualization and design of students’ high school experiences. The district now features 37 Linked Learning pathways across eight high schools. Of these, two have been certified as Gold—placing them among the first 12 pathways in California to earn that designation—and six have been certified as Silver. SBCUSD has also worked to extend its pathways program to Grades K–12, building early exposure in elementary schools and creating opportunities for applied learning in middle school that align with offerings in the district’s high schools.

The Motivation to Engage in Pathways Work

According to district leaders in SBCUSD, the focus on pathways evolves from the fundamental purpose of education: for all graduates to have a good job that enables them to provide for their families. Conversations early in the meeting highlighted the promise of educational pathways and the reasons that various stakeholders engaged with them.

Scientific Rationale for Pathways

Meeting participants reviewed an article from the Alliance for Excellent Education that summarized research on adolescent learning and development and outlined considerations for educators to best support the adolescent learning process.³ In their discussions about the article, participants identified ways in which pathways helped take advantage of the brain development taking place during adolescence. For example, educators can support students’ biological impulse toward risk-taking by providing positive and scaffolded means of trying new things through the selection of pathways and work-based learning experiences. Pathways can create vehicles for rewards—for example, the social recognition that can accompany the attainment of an industry certification—that are especially salient for adolescents. The importance of peer relationships for adolescent youth also creates opportunities to design the high school experience in a way that fosters peer connections. By providing a unifying focus for student course taking and developing a community around that focus, pathways can help youth create their identity during a vulnerable developmental stage.

Stakeholder Benefits for Pathways Participation: Job Skills

Pathways and the workplace learning experiences that those pathways provide can help students develop the 21st century skills they need for professional and life success. Some pathways create opportunities for students to learn certifications that are directly

² For more information on Linked Learning, see <https://www.linkedlearning.org/>

³ Loschert, K. (2019). *Science of learning: What educators need to know about adolescent development*. Retrieved from Alliance for Excellent Education website: https://all4ed.org/wp-content/uploads/2019/09/05-SAL-What-Educators-Need-to-Know-About-Adolescent-Development_FINAL.pdf

applicable to jobs during and after high school. Just as important are the transferrable soft skills that students can acquire through learning experiences that extend beyond the classroom. Internships and other exposure to the workforce often require students to work as members of teams. The jobs themselves also demand that students embrace responsibility. As one SBCUSD student explained, “Giving students responsibility is a bridge [that] shows them what life is like. Students can see what it’s actually like—a slice of the real, adult world. Students crave that.” Pathways can also open doors for students to exercise agency by selecting a pathway and workplace opportunities within that pathway that align with their interests and needs.

Opportunities for students to build job skills also introduce value to industry partners who work with school districts. By bringing students into the workplace, pathways can offer a pipeline for employers to recruit and retain employees for available jobs. SBCUSD leaders shared data showing that more than 50% of students participating in paid internships are subsequently retained in employment. The opportunity for industry partners to get to know participating students and see these students’ job performance while they are still in high school can make the task of recruiting and retaining their workforce much more efficient. The resulting cost savings can thus provide a tangible return on investment for employers.

Beyond self-interest, employers who partner with SBCUSD also described the pathways work as an opportunity to satisfy a personal or organizational commitment to serving students in the community. Employers can provide exposure, open possibilities, and inspire hope in students whose life experiences may not otherwise connect them with different work opportunities. For example, one of the district’s industry partners shared a story about 60 students from one school who volunteered to attend a Saturday engineering fair despite not knowing anything about the field of engineering. At the end of the day, 41 of those students expressed interest in becoming engineers. District partners can help open doors and open minds in ways that may not emerge from traditional school structures.

Stakeholder Benefits for Pathways Participation: Social Capital

Throughout the meeting, participants from various perspectives highlighted the power of pathways to provide exposure and facilitate relationships that were essential for success but were traditionally reserved for the advantaged. First exposure to the workforce often comes through a parent’s job; for historically underserved students, this can mean reinforcing a limited horizon of life opportunities. As one student explained, “I grew up hearing you can do anything, but my parents had blue collar jobs, so they couldn’t really help me.” Pathways can open new worlds of opportunities. According to another student, “Growing up, I felt totally miniscule. . . . I didn’t know what I could be or what I wanted to be. The pathway . . . exposed me to different opportunities, different mindsets. Instead of feeling as if, ‘Oh, I have to go do this,’ I got to look at a bunch of options.”

Student observations during the meeting further emphasized the potential of pathways not only to open doors but to change mindsets. Students described ways that pathways could illuminate a range of careers available in an area of interest; rather than pigeonholing students into a particular job at a young age, these opportunities can open doors even

wider. Furthermore, pathways can provide a window into the community and a student's role in it. A student shared, "The pathway gave me a window to the world in a way, to the community. These are the things I could do to have impact in my community. Now my vision is not, 'How do I get to college?' . . . It's now, 'How do I add to this community and how do I impact the people around me?'" An SBCUSD principal captured what these opportunities meant to a school leader by saying, "I pride myself on trying to build a culture of hope."

Beyond the influence of pathways to create workforce exposure, students also described ways in which pathways could foster a community of peers within the high school setting. "In our pathway, they like to call us one big happy family," one student explained. "We bond personally [and] make friendships. We work together. You feel small, but when you get into pathways you feel like part of something bigger." As they unpacked the conditions that enable this sense of community, students from multiple schools described powerful relationships with a key teacher that held a cohort together and helped students navigate challenges. They further characterized their pathways as an outlet for managing the stress, anxiety, and depression that often come with the high school experience. For their part, principals and teachers also described increased levels of student engagement within pathways that helped to foster a more productive learning environment.

Stakeholder Benefits for Pathways Participation: Students Can Do It

Across conversations throughout the meeting, participants emphasized that students were ready for the challenge that pathways presented. Authentic workforce experiences and the combination of rigor and applied learning in the classroom demands more from students than a traditional high school course sequence. SBCUSD leaders asserted that students had routinely met and exceeded those elevated expectations. As one district leader explained, "Our workforce is hiring our kids, not because they want to feel good, but because they do a great job and they want to do a great job." Conversation throughout the meeting would emphasize the importance of recognizing and putting faith in youth while also equipping them to take advantage of the opportunities in front of them.

The Importance of Pathways in San Bernardino

The commitment to pathways takes on particular meaning in San Bernardino, where education leaders seek to combat and reverse historical patterns of low student performance within schools and depressed economic activity in the broader community.

Pathways can help address gaps between community needs and individual preparation to meet these needs. Many of the major employers that once helped San Bernardino thrive—including a steel plant and an air force base—left the city, and many of the jobs that remained were performed by people who commuted from other cities. Against the backdrop of these losses, district leaders also explained that the school system had historically fallen short in preparing students for the openings that existed in the area. For example, teachers may not understand these opportunities. As a SBCUSD administrator explained, "Our faculty, our staff, largely doesn't get out into the real world [of work]. They don't know what the real world is looking for." At the same time, some students have not

been able to build the social capital necessary for success until pathways began to open doors. “The equalizer, when we’re talking about equity, is relationships,” the administrator continued. “A lot of times, when you want to get a job in the county, you have to know somebody. Now our kids know somebody.” Furthermore, there are opportunities to apply their social capital to an expanded set of job opportunities. District leaders described a local employer, for example, from which 45% of the workforce could retire in the next year if they so chose. Well-paying jobs like those are available to well-prepared students coming out of high school, higher education, and other career preparation programs. A district leader described the shift in mindset that SBCUSD was seeking to promote: “As a school district, we should see ourselves as the largest talent producer. Now we’re trying to get that message burned into the hearts and minds of our employers.”

The pathways effort is part of a broader movement to bring community partners together to revitalize the San Bernardino city and region. The city’s collective impact initiative seeks to bring educators, employers, and other partners together in service of broader shared goals, and pathways provide a vehicle for leveraging the collective strength and assets of these partners. Describing the district’s philosophy of partnership, a SBCUSD leader declared, “When you want to accelerate change, you bring together more people than is practically possible.” Pathways provide a forum for coming together and working collaboratively in mutually beneficial ways.

Fostering Effective Workplace Learning: Challenges and Strategies

One of the core components of a high-quality pathways program is the opportunity for students to engage in real-world learning opportunities connected to the workplace. Although SBCUSD has established effective partnerships with multiple local employers, it continues to seek new relationships that can extend its connections to industry and create opportunities for internships and other exposure to the workplace for all high school students in the district. Through discussion with a panel of local employers and a consultancy with district leaders, meeting participants sought to unpack a problem of practice confronting SBCUSD: “How might we engage business and community organizations in two-way, value-added partnership to provide work-based experiences for our high school students?”

Challenges That Stand in the Way of Quality Workplace Learning

Employers at the meeting described limitations that prevented them from providing work opportunities for students. Providing internships often requires that organizations have job openings; many employers simply do not have work available for students to do. In addition, incoming student skill levels dictate opportunities for employers. Although internships are designed to expose students to a particular industry and help them develop relevant skills, many jobs require students to walk in the door with skills or experiences that equip them to contribute right away. For some employers, high school students do not have the necessary qualifications.

Meeting participants also noted that employers sometimes had insufficient capacity to take advantage of an internship program. Limited familiarity within an organization with youth

or the K–12 education system can make it difficult to see the opportunities for students to contribute and to design an effective internship. If student interns do work with an employer, permanent employees might have to take time away from their responsibilities to work with these interns, a luxury of time that not all organizations can afford. Districts and employers also struggle to secure ongoing funding that can sustain a partnership over time. Without the resources to offer paid internships from their own budgets, districts and employers often rely on outside funding sources that can be unpredictable and short lived. Finally, employers at the meeting shared a challenge they had experienced regarding timing: Because internships are often tied to an academic calendar, they often end right at the point when a student learns enough to be productive and add value to the partner organization. When students leave at this point, employers lose the opportunity to capitalize on the investment they have made in the student.

Strategies for Quality Workplace Learning

In their feedback about SBCUSD’s problem of practice, participants advised that districts should first establish clarity around what they and their partners were trying to accomplish with workplace learning. SBCUSD has articulated the goal of creating “two-way, value-added” relationships, but what does this mean for districts, and what does it mean for employers? Moreover, what are the learning outcomes? There may be tension between offering workforce exposure to more students—which may mean access to the workplace but include menial job tasks—and ensuring meaningful experiences for students who participate when these opportunities may be fewer and farther between. There may likewise be tension between expanding opportunity for more students and securing paid internships. Participants also asked who should take ownership of the effort to develop internship opportunities. Districts are closest to the students seeking workplace connections but may have weak connections with employers or lack access to funding for internships. A strong chamber of commerce may be an important coordinator of these efforts, but what happens when it is unable or unwilling to play this role?

In service of expanding relationships with employers and opportunities for students, districts can engage in marketing and awareness efforts. Existing partners—especially those who have experienced a financial benefit from participation in pathways work—may be the best advocates for peers to develop their own relationships with a district. Other community members, like faith leaders, may likewise serve as champions for the work. School tours can help employers understand the programs already in place and how these employers may fit in as new partners. Districts can also enhance their communication with parents and students to ensure that they understand and take advantage of the opportunities available to them. Participants noted that often community colleges had already established relationships with local industry; engaging community colleges as partners could help leverage those relationships.

Participants also identified ways in which districts could develop new relationships to enhance workplace learning opportunities that could build and evolve over time. Through collaboration with government and other community partners, districts may be able to create incentives for partnership, perhaps in the form of a tax credit. Districts may also consider attaching requirements to their contracts with outside vendors. For example, any

vendor whose work with the district exceeds a particular financial threshold would need to commit to providing workplace opportunities for the district's students. Expanding the pursuit of partnerships to a broader range of organizations can further open doors to new student learning opportunities. In addition to local for-profit businesses, universities and nonprofit organizations can provide avenues for student exposure to the workplace. In many communities, the school district is one of the largest local employers; to what extent do district leaders create workplace opportunities for students within their own organizations? Connections with individuals in the community can provide still further opportunities; retirees can serve as coaches and sources of expertise for students and teachers even if the retirees are no longer an active part of the workforce.

Finally, meeting participants suggested that districts could scaffold relationships with outside partners, creating opportunities for engagement that would align with an organization's readiness level. Some partners may be well positioned to develop a robust connection with the district, perhaps through an internship program for students. Others can contribute in ways that require less time and fewer resources—for example, visiting a school as a speaker or hosting a company tour—to provide exposure to students and potentially lay the groundwork for more intensive collaboration down the road. Industry partners can also scaffold student experiences over the high school career, slowly building from limited initial exposure to more job-embedded learning later in a student's high school career.

Creating Powerful Applied Classroom Learning

The promise of pathways comes not just from workplace learning but from a combination of career exposure with rigorous academics. Meeting participants explored the opportunities and challenges associated with creating high-quality classroom learning experiences.

Illustrating Pathway Learning Opportunities Through Demonstration Lessons

Participants experienced two demonstration lessons intended to illustrate the nature of students' pathways learning opportunities. SBCUSD has designated a set of Common Core demonstration teachers across the district who are available to be videotaped and observed by peers seeking examples of effective Common Core-aligned instruction. Two of these teachers joined the meeting to walk participants through an authentic classroom experience.

The first demonstration lesson represented a business and technology pathway in SBCUSD. The pathway, designed to serve 18- to 22-year-old students with moderate to severe disabilities, provided plants and produce to the district's food services and to a local food kitchen. As part of their participation, all students earned their food handlers' certification, and many helped teach important skills to younger students. During the meeting, the teacher—with assistance from pathway students—guided participants through the exercise of assembling tower gardens that the pathway used to grow produce.

The second demonstration lesson came from a district automotive pathway. Through their pathway experience, students developed skills to the point that they were working as mechanics on real cars by the end of their third year. Although a percentage of the students would go on to become mechanics, many chose other postsecondary options. Regardless of their educational and career choices, the teacher emphasized that all students had the opportunity to develop and practice a strong work ethic that would apply to any career they might choose. During the meeting, the teacher guided participants through an exercise to classify sockets; students from the pathway assisted with the process.

Through the lesson, the automotive teacher described ways in which the pathway incorporated connections to academics and industry. The most frequent and ongoing connections happened with the students' physics teacher but also took place in other content areas. For example, the teacher led an annual project within his class to build a solar boat. During the stage of the project that required students to calculate the propeller angle, the automotive teacher coordinated with the students' mathematics teacher so that activities in that class provided training and practice in performing that calculation. Similarly, the English class was actively involved in writing and editing the final report from the solar boat project. In addition to these academic connections, the automotive teacher also maintained relationships with peers in industry to ensure that students' pathway learning opportunities prepared them to develop and apply the same skills as mechanics working in the field.

Automotive pathway students spoke to the ways in which the connections between academic and technical learning improved their engagement in school. "I concentrate more in physics class," one student explained. Another added, "Auto shop has motivated me to go to school more, but also pay more attention in math and physics classes. I realize the shop isn't just preparing me for college, it's building my work ethic as well."

Embedding Rigorous Academic Content Standards Into Pathways Work

Meeting participants emphasized the importance of connecting pathways to academic content standards. One person argued, "It's easy to get caught up in the attractiveness of the pathway and forget about the importance of linking the pathways to the academics. That means interrogating what our students need to know and be able to do to be successful in that pathway and successful in life." To that end, comments during the meeting suggested that pathways should enable students to transition to viable postsecondary options. However, participants also clarified that the goal of the learning opportunities available in a pathway was to develop transferrable thinking and life skills, not to create an on-ramp to a specific job. The purpose was not for students to make a lifelong commitment to a career in their early teens. The end point was likely to change from what students expected at the beginning, but in a high-quality pathways program, they will learn important lessons along the way. By ensuring high-quality academic training as part of the experience, districts can position students to succeed in any postsecondary choice.

Ensuring Great Teaching To Create Powerful Learning Experiences

Creating powerful learning experiences in the ways that participants advocated requires great teaching. By building opportunities for students to develop and use skills in work settings, pathways can help facilitate powerful applied learning experiences. However, mere access to the real world does not ensure excellence. Moreover, schools and districts must address the quality of instruction across the board. Through a second consultancy with district leaders, meeting participants sought to unpack another problem of practice confronting SBCUSD: “How might we prepare our teachers to design and deliver academically rigorous coursework that simultaneously incorporates industry standards and Common Core State Standards?”

Participants first emphasized the importance of developing clarity around expectations. Before determining how to improve, they suggested that districts needed to understand the current status of teaching in the district and then establish an explicit vision for what the district sought to achieve both in terms of student skills and teaching quality. The result of this process may be that educators need not only develop new skills but reconceptualize what their job entails.

Participants explored several opportunities for teacher learning within the school system once goals for teaching quality have been identified. Professional learning communities of teachers can be effective vehicles for peer-to-peer learning; incorporating both academic and industry content and skills into these learning opportunities can help enhance their value. Coaching is another vehicle for building teacher knowledge and skills. Although participants recognized that pathways created opportunities to make instruction relevant to the real world, they emphasized that instruction—not industry—should drive efforts to improve quality.

Participants also discussed ways in which district capacity-building efforts could appropriately leverage industry expertise. By developing teacher preparation or residency programs, districts can create a support structure to aid the transition for new teachers entering the profession from industry. In this way, districts can leverage the technical knowledge and skills that new teachers bring into the classroom while also equipping them to succeed in their new career. Districts may also consider ways of enhancing the learning environment with people from industry even if they are not the teacher of record. Recent retirees could play a role along these lines. Segments of industry that are losing members of the workforce may also be valuable sources of talent for districts, whether in a supportive role in the classroom or as candidates to become teachers themselves.

Pursuing Equity in the Design and Implementation of Pathways

Throughout the meeting, participants recognized ways in which pathways could disrupt the limitations of traditional high school design and classroom practice. However, without buy-in, ownership, and strategic implementation, pathways can reinforce historical inequities. Perhaps one of the greatest risks is that pathways can become a new form of tracking, in which schools funnel some groups of students into high-status pathways while grouping historically underserved students into pathways that closely resemble traditional

vocational education. Comments from members of the student panel identified some of the tensions they experienced between pathways and traditional approaches to rigorous academics in their high schools. One student explained, “It’s this huge weird subculture because the [international baccalaureate] mentality is college oriented and the pathway mentality is career goal oriented.” For pathways to be a vehicle for equity, participants suggested that all high school opportunities need to be perceived as oriented toward both college and career. If districts are to combat the threat to opportunity, active strategic approaches to recruiting students into pathways, providing access to all students, supporting students within pathways, and messaging about existing opportunities are critical.

Conversation during the meeting further suggested that school systems needed to create opportunities and access for all students. Exemplary pathways are often the byproduct of committed educators taking initiative, and these pathways can serve students in phenomenal ways. However, a key area of focus for districts is taking random acts of excellence to scale systematically. This approach requires addressing resistance from educators within the school system born of cultural views about who qualifies as college material and who should receive technical training in high school. To that end, stories can be powerful in changing hearts and minds. Participants noted how compelling personal accounts from teachers and students during the meeting illustrated the value of their experiences in the SBCUSD high schools. Stories like those can be part of a broader effort at system-wide cultural change. Participants also cautioned that, in efforts to create a systemic commitment to equity, leadership transitions could threaten stability. One person explained the typical district reaction to change by saying, “The system goes back to what’s comfortable.” In the context of pathways work, this can mean a retreat from new approaches to high school design and a return to flawed traditional school and classroom practices. Participants emphasized that developing a community of leaders willing to champion the work inside and outside the school system through horizontal and vertical coordination could enable districts to sustain the work through leadership turnover.

In the spirit of equity, participants also argued that creating opportunity and access meant supporting student agency. Traditional forms of tracking can exist when some students have insufficient knowledge about or access to the opportunities that their peers enjoy and when adults make decisions for students based on their conceptions of where a student fits best. Participants emphasized, however, that students had the capacity to manage more choice and opportunity than adults in schools often gave them credit for. To thrive in a pathways environment, students need the information and the opportunity to advocate for themselves. As one individual stated, “We need to make this a choice that *kids* make, not a choice adults make for them.”

Monitoring Progress in Pathways Implementation and Impact

A continuing thread in the Collaborative’s meetings in recent years has been the philosophy and practice of continuous improvement. For approaches to educational improvement—like pathways—that depart from traditional practice, the process of ongoing data collection, reflection, and action is essential to building on successes and addressing challenges. Participants explored several metrics that provided evidence of success in

addressing equity issues and could inform district and school decisions about developing, refining, and expanding pathways efforts.

Measures of student opportunity are one critical lens through which to examine pathways success. This is especially important for monitoring and counteracting the possibilities for pathways to reinforce traditional inequities within the K–12 system. Key measures include enrollment in various pathways and access to workplace learning experiences. For these and all other measures, districts should ensure the disaggregation of data for different groups of students. Any disparities in access to particular pathways, internships, or other opportunities represent a call to action for districts that have allowed these disparities to emerge or persist.

Measures of student outcomes provide further evidence of pathway quality. Traditional measures of high school attainment, including graduation and A-G completion provide one indicator of success. Suspension and chronic absenteeism rates can offer insights into student engagement. California’s recently adopted college and career readiness indicator is also instructive, but for it to be truly informative, districts should examine the breakdown of the indicator’s components to see which criteria different high schools met and for which students. Another key measure of pathway effectiveness is student success after high school. The National Student Clearinghouse offers data on college enrollment and degree attainment. Partnership between districts and local institutions of higher education can offer more detailed data on course taking and academic performance. In addition to these extant data sources, participants also recommended that districts think about measures that could capture aspects of the high school experience that might be unique to pathways. For example, how might pathways experiences foster students’ ability to talk to adults?

Participants also suggested other measures, beyond student outcomes, of program quality. The Linked Learning certification approach offers a rigorous assessment of pathways according to well-established criteria that apply across a range of contexts. Data from students through surveys or interviews is also illuminating and potentially vital for district leaders to understand the student experience. In reference to the student panel during the meeting, a SBCUSD leader reflected, “I probably learned more from listening to the kids yesterday than from observing classrooms.” Participants also advised districts to examine perceptions of pathways’ quality from multiple perspectives and look for any discrepant views among students, teachers, and administrators. Educators often have a particular perspective on the successes and challenges of the pathway design and implementation at their sites, but it may or may not align with the student experience in that pathway.

Next Steps for the Collaborative

The collaborative will convene again in Burbank Unified School District in March 2020 to continue and deepen the focus on matters of equity in K–12 education. In the meantime, the Collaborative staff will continue to pursue publications and activities that share key lessons from our core meetings with the broader field of California educators. As always, resources from this and previous meetings, updates regarding Collaborative members, and information concerning upcoming events, are available on our website at www.cacollaborative.org.