



Chapter Seven

building college and career knowledge in continuation high schools

*Elisha Smith Arrillaga, Ph.D.
and Amal Amanda Issa*

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Problem of Practice

How to design Linked Learning/CTE Pathways in continuation high schools to ensure equitable access to college and career opportunities for youth who are vulnerable to dropping out of high school?

Abstract

In Oakland Unified School District (OUSD), three continuation high schools successfully integrated key elements of the Linked Learning approach and created college and career pathways with support from district leaders and a capacity-building intermediary. This chapter describes how the schools built on their strengths to design a pathway, found dynamic individuals inside and outside their school to help, and enabled students to gain high school and college credit and career readiness. The chapter also offers lessons for continuation high schools and other types of educational programs serving vulnerable teens that aspire to increase student access to college, better prepare them for career decisions, and improve students' experience and success in high school, college, career, and community.

Background

WHAT ARE CONTINUATION HIGH SCHOOLS?

In California, many students who struggle in comprehensive high schools are assigned to continuation high schools. Continuation high schools are alternative credit acceleration programs for students who are sixteen years of age or older and are at risk of not graduating. Most students enter continuation education because they are behind in high

school credits, have had high truancy or expulsion rates, and/or have had behavioral challenges. Some students need a flexible school schedule because they have jobs outside of school, or have family needs or other demands on their time. Students in continuation schools are also more likely to be Hispanic, African American, and English Language Learners (Ruiz de Velasco et al., 2008).

Markedly different from comprehensive high schools, continuation high schools are funded to offer only 15 hours per week or three hours per day of direct instruction to students. Students take courses that are required for graduation, but that may be offered in more flexible delivery or pacing formats that afford opportunities for credit acceleration not otherwise available in traditional comprehensive schools (California Department of Education, 2018).



Students attend continuation schools in significant numbers. The California Legislative Analyst's Office estimates that almost 104,000 youth enrolled in a continuation high school during the 2013-14 academic school year (Ruiz de Velasco & Gonzales, 2017). In Oakland, continuation school enrollment accounts for nearly 8% of the eleventh and twelfth grade student enrollment in the district; 462 students attended one of three continuation school sites in 2016-17 (EdData, 2017).

Students in Linked Learning pathways are four times more likely to graduate from high school and are more likely to attend college and/or postsecondary training (Warner et al., 2016). Yet the model for Linked Learning presumes several years of student pathway work that progressively builds and grows on its foundations. These are the stories of how continuation high schools teamed up with a capacity-building intermediary—the Career Ladders Project (CLP)—to design Linked Learning pathways that respond to the unique challenges facing students in alternative school settings. CLP aims to improve educational and career outcomes for Californians through research, policy reforms and strategic assistance to community colleges, as well as their K-16 education, workforce, and community partners.

Three Core Practices for Designing and Building Pathways in Oakland Continuation High Schools

All three of Oakland's continuation high schools, Dewey Academy, Rudsdale High School, and Ralph J. Bunche Academy, have successfully implemented pathways. Throughout the process of design and implementation, three essential core practices emerged: (1) integrating pathway programs with existing school assets; (2) providing students with college exposure, especially by taking a college course; and, (3) providing youth with work-based learning experiences.

PRACTICE 1: INTEGRATE THE PATHWAY WITH EXISTING SCHOOL ASSETS

The challenging process for designing and implementing pathways at a continuation school requires school leaders to think creatively about leveraging their existing assets. The Oakland schools took time to scan the programs

and partners already in place and considered potential collaborations to provide students with authentic experiences that helped them to realize their college and career ambitions. When school leaders incorporate early college credit opportunities and design clearly sequenced pathway courses and experiential learning, it can greatly improve students' college transitions and overall success (see <https://connectednational.org/>). This section is about how three OUSD high schools leveraged their existing partnerships, programs, and youth voice to decide on a single pathway focus while building relationships with colleges and industry partners.

Asset Mapping

In determining the right pathway, high schools built on what they were already offering. As a first step, school leaders and youth collaborated on an asset mapping process, including a review of the master schedule, available field trips, programs, and pre-existing supports from partners. This enabled them to identify elements already present in the schools and upon which they could capitalize to develop a workable pathway. At Dewey, as in other OUSD continuation schools, there is no common school calendar for all students. Each student enrolls and exits at different times during the year, thus experiencing an individualized program of study and high school journey. Dewey Academy took part in this type of self-study, taking a closer look at the school holistically, and found that their greatest assets are the people committed to the school. Dewey's art teacher had a passion for physical training. He would hold afterschool fitness sessions for students interested in training. He soon completed his Career and Technical Education (CTE) credential and offered health-specific courses giving students an opportunity to engage in physical health while learning about careers in the field. Similarly, at Rudsdale, an afterschool provider was managing a program for students to learn about computer hardware repair. The program generated great interest from students and served as a platform to build upon. Meanwhile, at Bunche Academy, administrators had a great interest in exploring a hospitality and tourism pathway. Spreading the word through their networks, Bunche was able to recruit a chef with interest in teaching. The school leaders and chef used energy and passion to connect with a large, well-established network of culinary professionals. They also connected with the staff of a local community college culinary pathway. Next, each school surveyed the staff as part of the asset mapping process to identify teachers who have interest in specific industries and/or meet minimum qualifications to teach dual enrollment courses.

Each school narrowed its focus to one pathway to ensure the quality and breadth of the programs to be developed. District and site administrators took note of the pathway selection process at each continuation school to minimize duplication and to ensure that students would have access to a portfolio of continuation high schools that would offer different pathway options. It was understood that, for students needing to attend continuation schools, choice is significantly limited when compared to the comprehensive schools, which offer 15 industry pathways. These limited options are further exacerbated by the lack of actual choice students have when selecting a continuation school to attend. However, it is important to consider that pathway schools also encompass college exposure and professional skills not limited to any one industry. The value of applied learning benefits all students regardless of the industry (Career Ladders Project, 2018). Building partnerships, creating integrated curriculum, implementing internships, and maintaining college partnerships is challenging work that is made more doable when faculty in a small school can focus on just one pathway.

Dewey Academy, for example, invested time to determine the one pathway that fit their school schedule, student interests, and mission. Multiple pathways were considered in the initial planning phase, including general health and fitness as well as trades and apprenticeship. The school already had a teacher who was passionate about physical training and health who drove the theme forward. Through the ongoing conversations and feedback, the school realized that simplifying their pathway focus would allow for a higher quality program. From this point, the Dewey design team was able to focus and align the school programs, partners, and offerings that resulted in the move from Figure 1 to Figure 2 (below).

Using this model for the pathway, the school began thinking about ways to bridge their current programs and curriculum with the local community college. Comparing the offerings at Laney College, Dewey realized an opportunity to focus on Kinesiology and Personal Training to align with Laney’s Sports Medicine/Patient Care focus.

Parent, Student, and Teacher Involvement in Pathway Design

Across town at Rudsdale High School, staff initially struggled to decide between two different industries: technology and health. With a surge of interest in technology, especially in the Bay Area, Rudsdale went through an extensive assessment of the options available. CLP, in collaboration with local community colleges, created two different program maps for Rudsdale, which included aligned industry career options and areas for embedded supports around workplace learning and dual enrollment (see Appendix). The program maps were then presented by staff and families during a school event. Simultaneously, students were asked to review the options and provide feedback. The findings were all presented to Rudsdale staff who then took part in their own survey. This process of involving the school community of parents, students, teachers, and school staff was essential to pathway design to ensure the pathway reflected what the community was most invested in and what career pathways were aligned locally.

Using the results and feedback, the Rudsdale pathway team recommended to the principal and assistant principal that the school divert from their dual-themed pathway and focus on one pathway only. This redesign resulted in a shift to information technology with an even narrower focus on Games and Simulation. This decision was informed

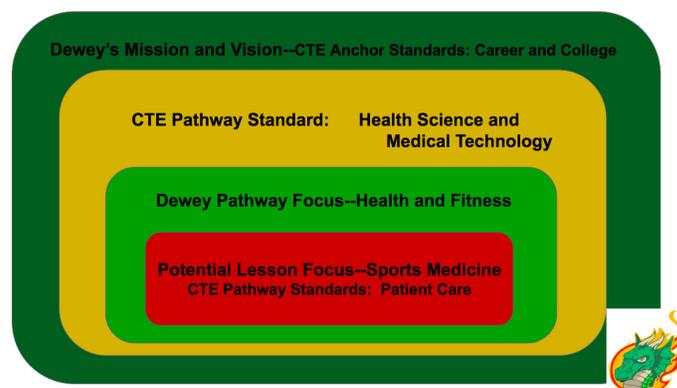
FIGURE 1:

ORIGINAL DEWEY ACADEMY PATHWAY IDEA 2016



FIGURE 2:

CURRENT DEWEY ACADEMY PATHWAY FOCUS 2018



by student interest, standards correlation with existing curriculum, and the prospect of partnering with startup gaming programs in the East Bay. Given the shift in pathway focus, Rudsdale continues to work on mapping out the new pathway and phase out previous health programming in order to build a quality program of study.

Partnerships with Local Colleges

Closely examining the assets and programs available at local community colleges was another helpful exercise for each high school pathway team to participate in. The teams considered the following questions: what colleges are nearby and/or accessible physically or virtually? What can they offer? Does the high school district have a memorandum of understanding (MOU) in place with a college?

Based on student interest and proximity to a local college program, Bunche Academy built a culinary pathway. The college they were working with had a clearly mapped sequence towards culinary industry certifications. Bunche Academy also hired a CTE instructor, as mentioned above, with close relationships to the local college. The CTE instructor had over 20 years of experience as a chef and worked with the staff at Bunche Academy to design CTE courses in culinary arts that provided students with the content knowledge needed to access the dual enrollment courses at the local college. Bunche Academy now has a four-course dual enrollment program, two of which are in culinary arts and two other electives of interest. Their strong relationship with Laney College has informed and supported the growth of Bunche's culinary pathway.

Industry and Community Partnerships

It also proved useful for pathway teams to identify an industry partner and collaborate with existing community partners whose staff demonstrated a desire to support youth. For example, CLP collaborated with site leaders at Dewey Academy to build workplace learning opportunities. As a community partner, CLP worked with the county health services agency and the Dewey school-based health center to develop a pilot program for students who were interested in participating in a career exploration visit to the on-site school health center. Students were able to walk to the center and engage in an interactive visit where they learned about health-related careers. Based on the success of these on-site visits, the Dewey staff worked with CLP and executives at a local hospital to plan off-site career exploration field trips. During these events, students were exposed to careers in

health and were able to practice technical skills and build community within their cohort. Building on the success of the career exploration visits, CLP facilitated further conversations between Dewey and the local hospital. The organizations worked together to determine how the hospital's current internship program could be altered to serve the needs and constraints of students in continuation high schools. For example, many students at Dewey needed to attend summer school during the hours of the summer internship, so CLP and the hospital needed to think through what program timing might best accommodate Dewey students. It was important to help the prospective industry partners understand the backgrounds and learning needs of students in alternative schools. In some cases, the sites were not a good fit for the students and the schools knew to look elsewhere for opportunities. Coordinators were steadfast advocates and found industry partners who could support the success of students in continuation high schools.

After several planning sessions, a new cohort of continuation students was introduced to an internship program that was exclusively for them. The process of reaching out to students, encouraging them through the application process, and supporting them through the program, was all coordinated by the work-based learning liaison and supported by CLP. This also included arranging transportation and completing health screenings and enrollment documentation.

Staff from continuation schools and their community stakeholders created organizational structures to facilitate collaboration as well as pathway design and implementation. Initially, some high school staff were skeptical about implementing pathways, with some justification. For example: the primary focus of continuation school sites has always been credit recovery. How might student pathway participation advance or distract from that goal? How would the school, which already struggled to teach core English and math requirements in an abbreviated timeline, layer on even more content? Who on staff would have the expertise to teach new pathway content?

Supported by CLP, the schools used the pathway design process as a forum for educators to ask critical questions, share their concerns, and create a community of practice. In fall 2015, for example, OUSD's Director of Alternative Schools officially launched a planning process called the OUSD Continuation High School Design Lab. The Lab held gatherings comprised of pathway leaders and staff representing each OUSD continuation high school with the

goal of learning from one another, building knowledge about pathways, and determining the student supports necessary for pathways in continuation high schools. In their first year, the group of pathway leaders gathered for a design retreat and then met once a month during the district's Wednesday professional development time. The design retreat was also held in the second year, and the group continued to meet during common planning time once every other month. Topics in the Pathway Design Labs included:

- What is a pathway?
- How do the Four Pillars of Linked Learning (i.e., rigorous academics, technical skills, work-based learning, and personalized support) apply in continuation high schools?
- What are some exemplary models of pathways throughout OUSD?
- How do we develop a vision and mission at our school?
- What is Design Thinking?
- What are Inquiry Cycles; and how can they support effective pilot design and implementation?

The Importance of Staff Buy-In

The Pathway Design Lab process allowed continuation school site staff to come together and share their experiences and learn from each another while building trust and partnership with CLP to do more one-on-one, site-based work. These meetings were designed and facilitated by school district staff with the goal of helping the school leaders to learn about the elements of an effective pathway, clarifying each school's identity, and building a network of trusted supports. Staff used these opportunities to receive guidance and feedback in assessing and designing their pathways. Holding space for teachers, administrators, and support staff to ask questions, learn, and validate their own struggles is important. This staff development can nurture a more trusting and determined group of educators who are willing to take on the work of pathway implementation with eagerness and creativity.

PRACTICE 2: EXPOSE STUDENTS TO COLLEGE THROUGH FIELD TRIPS AND DUAL ENROLLMENT

Dual enrollment enables students to engage in college-level work while receiving the structured supports of the high school setting. In California, state policymakers have passed legislation to promote dual enrollment, and have empowered many continuation schools throughout the state to build deeper relationships with their neighboring community colleges (California Community Colleges

Chancellor's Office, 2016). Dual enrollment is a strategy for providing historically underrepresented high school students with opportunities to earn college credits at California Community Colleges (CCC) while they complete the requirements for their high school diplomas. Students who may have never seen themselves as college-going now have an opportunity to excel and build confidence.

Each OUSD continuation school worked closely with CLP, which has expertise and deep connections to local colleges. Together, they selected pathway-aligned dual enrollment courses within the Peralta Community College District and two of its colleges: Laney and Merritt Colleges.

An existing MOU helped continuation schools connect with the community colleges. The goal was to offer students the opportunity to accumulate college credit through dual enrollment courses that align with each school's pathways. Each school's pathway design team, administration, and teachers collaborated with the district dual enrollment coordinator and college representatives to determine the best fit. In these meetings, the high school's current program of study was examined and courses at community college were suggested. Although the district's agreement with the colleges requires a minimum enrollment of 35 students, the dual enrollment coordinator worked with the colleges to agree to bring the required enrollment down to 25 to better serve and support continuation school students. This change made a huge difference in the high school's ability to offer dual enrollment.

The Role of College Instructors

College instructors were key to successful dual enrollment in continuation schools. Bunche Academy has a strong program of four dual enrollment courses in Culinary, Business, and Ethnic Studies, with a 90% passing rate for continuation high school students. During the 2016-17 school year, Bunche Academy had approximately 100 students enrolled across all four classes. According to the staff at Bunche Academy, a significant consideration in their success rate is school leaders' careful vetting of the participating college instructors.

Dewey Academy opted for an Intro to Personal Training course in the Kinesiology Department as well as a general counseling course. In 2017-18, there were 25 students in the general counseling course and 29 students in Kinesiology. A unique feature of the counseling course is that the college instructor took interest in ensuring that students received full

exposure to college. He took students on frequent field trips to the college campus to introduce them to programs, people, and facilities.

At Rudsdale, as noted earlier, staff initially experimented with a pathway focus in Health Education in partnership with Merritt College. In this first iteration, the instructor and students had a difficult time adjusting to college instruction methods. Approximately 20 students enrolled, with an estimated 50% pass rate in 2017-18. However, rather than experiencing defeat, the instructor was inspired to adjust the instructional model to better support students in subsequent years. All three schools had instructors who were willing to look beyond their traditional instructional approaches; instead, they adapted their methods and curriculum while maintaining high standards to best meet the needs of the students. Finding instructors has been a challenge, which is not unique to these continuation schools; but finding a good match, with instructors who believe in the students' potential, has been even more critical.

Course Articulation Agreements

Although all three schools have found success in supporting students towards earning college credit, it remains a challenge to secure courses that fit with each school's needs and level of preparedness. These continuation schools have between 150 and 200 students at any given time, with a revolving enrollment throughout their six-week marking period cycle. The Peralta Community Colleges, by contrast,



run on a typical academic calendar. It has been difficult for continuation schools and community colleges to square the differences in their calendars. Rudsdale, in particular, has had difficulty in getting computer classes on the partnering college campus for their students. To solve this logistical problem, the school district and college have turned to course articulation agreements. Unlike dual enrollment, the process of setting up a course articulation agreement is less formal and allows for more flexibility. The high school can adapt one of their current classes to align with a course offered at the college. Given college approval, students who receive a grade of A or B in the course can be eligible for college credit. This model is ideal for the school because it can provide the rigor of college content while providing the needed supports and mode of instruction familiar to high school students. Currently, Rudsdale is working to establish articulation agreements to provide college-level introductory courses in computer science.

Additional Supports

Additional supports were necessary for student success during the dual enrollment course semester. Dewey school leaders worked with their current afterschool and expanded learning partners to determine how existing supports could be better aligned or integrated with the new pathway approach. The Teacher on Special Assignment (TSA) was tasked with supporting students with enrollment and perseverance through the college course. This district support was adapted in different ways depending on the students' availability. Sometimes the TSA provided homework and tutoring help during their regularly scheduled classes. Other times, students received support during their advisory class period. Dewey, determined to strengthen the supports for students around their dual enrollment, connected with a health provider to provide students with a health education-related extracurricular activity that supported their success in the dual enrollment course.

PRACTICE 3: WORK-BASED LEARNING

Work-based learning programs help students to acquire valuable skills through first-hand experiences alongside industry professionals who can model what having a career is like. Integrating work-based learning experiences into the classroom can also make academic instruction more relevant by providing youth with opportunities to learn how knowledge acquired in the classroom might find life in an applied setting. These opportunities are important because researchers have found that low-income and

minority students who participate in work-based programs enter college at twice the rate of non-participating minority students (Rogers-Chapman & Darling-Hammond, 2013) School leaders frequently used the Work Based Learning Continuum to understand the process and purpose of workplace learning and the outcomes aligned with specific experiences (National Academy Foundation, 2012). At Bunche Academy, students in the culinary pathway have an opportunity to intern at a local restaurant while taking their culinary courses, enabling them to immediately see how their learning applies to the work. Together, these pieces motivate and enrich student learning. At Bunche, they also supported the skill development students needed to earn the ServSafe Certification to work in the industry.

Work-Based Learning Liaisons

Work-based learning liaisons at each site support teachers and students by managing and developing pathway-relevant workplace learning opportunities. When CLP started working with the continuation schools to build pathways, several school leaders mentioned the need to expand opportunities for students to explore various career options. To meet that need, each OUSD continuation school invested in a full-time position focused explicitly on work-based learning and associated student supports. The work-based learning liaisons connect students to industry partners for career exploration visits and internships. They also coordinate recruitment for summer programs, college field trips, and various other offerings. CLP worked closely with the work-based learning liaisons around pathway curriculum integration and helped to develop MOUs with industry partners. Although the liaison role was new, the individuals in these roles were often already part of the school community as prior staff or partners, so they were able to quickly build relationships with staff and students. This underscores the importance of assessing the school's assets to determine staff that could serve different role in supporting pathway development.

Schools were often already engaged in work-based learning without realizing it. Linked Learning practices are not necessarily new aspects of teaching and school structures. Rudsdale, Dewey, and Bunche, for example already had teachers bringing in guest speakers during appropriate times in their curriculum to give real world stories to the content learned in class.

These types of common practices align well to Linked Learning. Creating a strong pathway for students is a matter of identifying the practices and capitalizing on them to build

a cohesive program of study with aligned opportunities and supports. A reasonable early win is to review the practices present at the school and build from there.

Appropriate Work-Based Learning Opportunities

High schools work with their community college and industry partners to identify appropriate work-based learning opportunities. In the case of Dewey, they have been able to leverage their relationship with the school-based health clinic at the comprehensive school across the street to bring opportunities to the health pathways. This relationship further connected them with other community-based health providers who were willing to engage with this school. Given the capacity and success of their culinary program, Bunche now partners with the OUSD Central Kitchen and Services office to provide catering services for various events. With the leadership of the CTE teacher and school staff, students are also provided opportunities to intern at local restaurants to gain first-hand, real-world experiences. In the 2017-18 school year, Bunche had over 40 students complete internships, and many of these internships led to employment. Colleges are also great resources to recruit guest speakers and professionals for mock interviews, and find different opportunities for youth. All three of Oakland's continuation schools have built strong relationships with champions at the various colleges to build bridges between the college and the high school.

Credit-Bearing Work-Based Learning Experiences

Initially, Rudsdale students faced difficulties when asked to participate in work-based learning experiences, because the activities did not result in additional credits. Rudsdale teachers, support staff, and administration worked with CLP to think through how best to enable students to participate. As such, Rudsdale added a work-based learning component to their Senior Portfolio. The Senior Portfolio includes a collection of students' experiences on field trips, career exploration visits, college tours, and the interview feedback from the College and Career Symposium. In the symposium, students have a chance to show their portfolios, including resumes, to prospective employers and college counselors. Making this change helped students get graduation credit for their work-based learning experience and provided another opportunity to bring industry and students together. In just one year, the school had over 500 instances of students participating in work-based learning and college prep activities, including 11 college visits and 24 career explorations visits.

College and Career Wednesdays and Fitness Fridays

Each school made efforts to intertwine aspects of their pathway with pre-existing structures and routines. At Rudsdale, teachers incorporate pathway supports and common practices during their weekly advisory classes referred to as College and Career Wednesdays. During the advisory classes, teachers allow students to explore work-based learning opportunities by inviting industry partners to visit. At Dewey Academy, the school community participates in Fitness Fridays, a weekly event that allows students to interact in friendly physical activity challenges with peers and staff. Bunche Academy coordinated and hosted a Culinary Pop-Up event for community partners and neighbors. During this event, the students in the culinary pathway prepared meals for their guests and staged a silent auction to fundraise for their program.

Finding ways to weave pathway themes and supports into the daily routines of the school can be a heavy lift for school staff, but Oakland's continuation high schools have found that these efforts provide students with a fully integrated pathway school rather than a school with a pathway.

Support from the School District is Essential to Student Success

OUSD has embraced college and career pathways in its comprehensive high schools with a goal of having every tenth grade student in a pathway by 2020. Given this districtwide goal, individual schools have worked steadily to put staff and partnerships in place that will build their capacity to provide college and career pathways. OUSD developed a district-level Linked Learning Department, including a Linked Learning coach for every school, curriculum writers, work-based learning professionals, a dual enrollment coordinator, grant managers, and support staff.

For the continuation schools, the district's commitment to pathways has been helpful in providing funding for a work-based learning liaison, and dual enrollment- and additional staff to support pathway implementation. The district, with its public partners at the county and city levels, has sounded the bell for employers to be open and more forthcoming with work-based learning and job shadow opportunities for youth. Strategic, well-targeted, external financial resources have furthered pathways creation in Oakland public schools, including in continuation schools.

OUSD has enjoyed financial investments from numerous public, private, and community partners helping to fuel Linked Learning implementation. Most relevant to the continuation high schools, Oakland voters passed Measure N in 2014, a multi-million dollar parcel tax to help schools reduce the dropout rate, provide work-based learning opportunities, prepare students for four-year colleges, and expand mentoring, tutoring, and other support services (See <https://www.ousd.org/domain/4506>). Atlantic Philanthropies also invested heavily in OUSD and local health employers to create pathways and work-based learning opportunities in health. And, in 2015, OUSD participated in a state grant program aimed specifically at supporting alternative schools and programs that serve Opportunity Youth. These funding sources supported the full-time work-based learning liaisons at each continuation school and the health pathway. The same sources also financed the work of some of OUSD's implementation intermediaries, including the Career Ladders Project, which has been a key support to the continuation high schools over the past four years.

Conclusion

Developing a pathway in a continuation high school can seem like an overwhelming and sometimes fragile task, but leaders in Oakland have found that it is a worthwhile and desperately needed intervention to support the students who need it most. Students in continuation schools should not be denied opportunities to hone their skills in navigating college and careers. In schools like Dewey Academy, Bunche Academy, and Rudsdale High School, students need support more than ever to connect to the resources and people that can build bridges to the labor market. Though early in implementation, Oakland's experiment with college and career pathways goes a long way to inform other schools about new approaches to bolster connection and success.

As the work in OUSD shows, having a clear vision for pathways can help attract people and organizations eager to support schools with human and capital resources. Yet, as one partner observed, "*it's not all about the money.*" While OUSD enjoyed substantial investments in its broad-scale Linked Learning pathways implementation, the essential energy that fueled successful efforts came from the administrators, teachers, students, and employers who dedicated their time and effort to the task. How they repurposed their normal work every day was the fuel for change. Some of the strongest components of the

continuation school pathways have grown from within the schools themselves. At Dewey, for example, the Sport Medicine Health Pathway training program was pioneered by an art teacher who was passionate about physical training and saw how training benefitted his students both in the here-and-now and as a building block for their future. A ConnectEd pathway coach and a teacher joined forces to teach classes as a way to co-create a pathway and eventually advocate for more support. Much of the investment and support focused on making high school more relevant for students and increasing expectations for what all students can achieve.

In Oakland, the gradual development of an alternative education community of practice also connected schools with industry in a deeper way. Organizations such as Alameda County Health Care Services Agency, New Door Ventures, East Bay Asian Youth Center and Technology, Education And Literacy in Schools (TEALS), are just some of the strong partnerships within the community that have brought pathway experiences to life for students. The growth potential for alternative school sites relies heavily on the contributions of organizations with the desire to serve those who need it the most. In any institutionally integrated task, doing the work together will build stronger connections and achieve more than any one group acting alone.

As pathways in Oakland's continuation high schools progress, continued data-driven reflection to inform growth and decision making are needed. Industry specific pathway alignment is relatively new in continuation school sites. Will college and career going environments improve graduation rates and matriculation to college? It will be important to track pathway graduates' postsecondary enrollment, persistence, and employment outcomes. Moreover, it will be greatly informative to determine the career paths continuation students take after graduating. The district's central office can provide numerous reports on student indicators that can inform the school on the outcomes for their students.

Reflecting on implementation and support structures to ensure that necessary outcomes are being met will be critical. Thinking critically of the school's data will ultimately serve as a medium with which to reassess programs and interventions that appear successful and will engage the staff in refocusing their efforts on structures that allow students to be successful. Indeed, emphasis on connecting school and industry while

motivating students in a college and career experiences aligns with greater outcomes for students while meeting the standards articulated in the 2018 California School Dashboard indicators. Ultimately, there is a need for more experimentation, investment, and reflection on student outcomes to better understand how, and under what circumstance, Linked Learning practices can be effectively implemented in alternative settings. The lessons learned from the OUSD continuation schools are especially applicable to district and county-operated alternative schools, including continuation high schools.

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Appendix

PROGRAM OF STUDY: PUBLIC AND COMMUNITY HEALTH

Linked Learning Component	Course Offerings	PCH Pathway Classes	Current Classes
		2018-19	2017-18
Rigorous Academics	English	English 1, English 2, English 3, English 4 Health curriculum for ELA—Medical English	English 1, English 2, English 3, English 4
	History	Medical U.S. History, World History, Economics, U.S. Government Health Records Certificate	U.S. History, World History, Economics, U.S. Government
	Mathematics	Algebra, Geometry	Algebra, Geometry
	Science	Physiology, Medical Chemistry	Biology, Earth Science
	Electives	Physical Education, Art, Culinary, Fly Law, HiFy, Gardening, Mental Health Groups, Youth Speaks	Physical Education, Art, Cooking, Cosmetology, Fly Law, HiFy, Internship Skills, APEX, Young Women’s Group, Music Production, Spoken Word
Career Technical Education	CTE	Public Health I, Health Careers I, Health Careers II Public and Community Health CTE Courses Mental and Behavioral Health CTE Courses	
	Dual Enrollment	Health Ed I, Intro to Community Health, Survey of Health Care Interpreting	
	Certifications	CPR Certification, Medical Interpreter Certification, Health Work Advantage Certificate, Health Care Records Certificate	
Work-Based Learning	Work-Based Learning	Highland Hospital, West Oakland Health Council, Bright Young Minds, Career Symposium, Career Panel	Wow Farm!, HEAL at Highland Hospital, On-Site Health Advocates, Ruidale Student Run Enterprises, Ready Set Connect, Genesys Works, On-Site Social and Digital
	College Exploration Visits	SFSU Health Department; College of Alameda - Dental Assistant; Merritt College – Nursing, Radiology, Microscopy, Medical Interpreting; Berkeley Community College – Community Health Worker; East Bay – Kinesiology, Nursing	Peralta Community Colleges: Laney, College of Alameda, Merritt, and Berkeley
Personalized Supports	Advising	Lifelong Medical, West Oakland Health Council, La Clinica, Veterinary Hospitals	Advisory, College and Career Center, East Bay Agency for Children, Restorative Justice Practices, TUPE (Alcohol, Tobacco, and Drug Intervention), Case Managers

PROGRAM OF STUDY: GAMES AND SIMULATION

Linked Learning Component	Course Offerings	GST Pathway Classes 2018-19	Current Classes 2017-18
Rigorous Academics	English	English 1, English 2, English 3, English 4 Topics: character development, storyboards, ethics of artificial intelligence, Udacity online – capstone class	English 1, English 2, English 3, English 4
	History	U.S. History, World History, Economics, U.S. Government Topics: innovation throughout history, industrial revolution	U.S. History, World History, Economics, U.S. Government
	Mathematics	Algebra, Geometry Topics: graphic design, Boot Strap coding	Algebra, Geometry
	Science	Physiology, Anatomy, Physics Topics: robotics, snap circuits, physics, green technology	Biology, Earth Science
	Electives	Existing offerings plus Graphic Design, Coding, and 3D Printing	Physical Education, Art, Cooking, Cosmetology, Fly Law, HiFy, Internship Skills, APEX, Young Women's Group, Music Production, Spoken Word
Career Technical Education	CTE	Games and Simulation CTE Courses Capstone Tech Course	
	Dual Enrollment	Chabot College, Laney College, Berkeley City College, Welding and Machinery Program	
	Certifications	Computer Programming with Java Computer Programming with C++	
Work-Based Learning	Work-Based Learning	OTX, on-campus social media leads, website development internship, UC Berkeley School of Engineering, OUSD IT Department, Bruce Cox Green Building, Chabot Space & Science Center, Genesys Works, YearUp, ScriptEd_, Olimpico	Wow Farm!, HEAL at Highland Hospital, On-Site Health Advocates, Rudsdale Student Run Enterprises, Ready Set Connect, Genesys Works, On-Site Social and Digital
	College Exploration Visits	Chabot College, Peralta Community Colleges: Laney, College of Alameda, Merritt, and Berkeley	Peralta Community Colleges: Laney, College of Alameda, Merritt, and Berkeley
Personalized Supports	Advising	Advisory, College and Career Center, East Bay Agency for Children, Restorative Justice Practices, TUPE (Alcohol, Tobacco, and Drug Intervention), Case Managers	Advisory, College and Career Center, East Bay Agency for Children, Restorative Justice Practices, TUPE (Alcohol, Tobacco, and Drug Intervention), Case Managers

About the Authors

Elisha Smith Arrillaga, Ph.D., is interim co-executive director for the Education Trust West, a research and advocacy organization focused on educational justice and the high academic achievement of all California students. Dr. Smith Arrillaga has several publications and presentations on alternative education and college and career pathways including *Promising Practices in Supporting Postsecondary Success in Alternative Education*. Dr. Smith Arrillaga has more than fifteen years' experience teaching and working in education policy and workforce development. She believes that student voices should be at the center of systems change to increase access and success.

Amal Amanda Issa is the senior program manager for Career Ladders Project, an organization aimed at fostering educational and career advancement for Californians focused on Guided Pathways throughout California's Communities Colleges. Issa has supported pathway work statewide with the California Career Pathways Trust (CCPT), developing Linked Learning principles throughout continuation schools. Her work has been in various publications on alternative education including *Project Pathways' Guiding Students to College and Career Success* and *Students Leading the Way*. Other publications include *The Dual Enrollment Game* highlighting the student perspective of dual enrollment, policy, and research. Issa has spent the past ten years in education roles, including academy director at a Linked Learning site and adjunct professor in Allied Health for Merritt College.

This chapter is part of a guidebook, made possible by a grant from the James Irvine Foundation, on integrated student supports for college and career readiness. The guidebook offers seven illustrative profiles of educators and their partners in California high schools who are working collaboratively to develop comprehensive student supports that “link together” a rigorous academic curriculum, technical education, and workplace opportunities into a coherent learning experience for every youth in their school.