PATHWAYS TO COLLEGE AND CAREER READINESS:
BRINGING THE NEW CALIFORNIA STANDARDS TO LIFE THROUGH LINKED LEARNING

The Education Trust–West
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Year after year, the data tell us that many students—disproportionate numbers of low-income and students of color among them—do not graduate from high school ready for college and career. Thoughtful secondary-level educators have long agreed that a big part of the solution lies in educational experiences that are intellectually rigorous but also engaging and relevant to students’ lives. In practice, though, most high school educators have found that bringing both criteria into the classroom is extremely difficult. Some high schools provide rigor, others master relevance, but few deliver on both.

One promising approach that is spreading rapidly across California is Linked Learning, an initiative focused on four key components: a college-preparatory curriculum, a robust and coherent sequence of career-related coursework, work-based learning, and personalized student support services. Linked Learning meaningfully engages students through rigorous academic content that is closely tied to real-world work experiences. It focuses on 15 industry-themed pathways (courses of study), including engineering, biomedical and health sciences, finance and business, and art, media and entertainment.

The challenge, though, is how to assure that students who are enrolled in Linked Learning pathways emerge truly ready for both college and career. That’s where the new standards adopted by our state come in: Common Core, Next Generation Science, and English Language Development Standards (see sidebar). By skillfully integrating the Linked Learning approach with the new standards, educators can create a promising opportunity to ensure that rigor and relevance are front and center in the high school experience.

This is the theory behind the California Linked Learning District Initiative (CLLDI) that got underway in nine school districts in 2009 with substantial support from the James Irvine Foundation and ConnectEd: The California Center for College and Career. To understand how this theory is playing out in practice, we interviewed the leaders in a few of these districts about their initial efforts to integrate these two potentially powerful vehicles into an even more powerful whole.
ASSURING THAT LINKED LEARNING LIVES UP TO ITS PROMISE
Preliminary research suggests that students of color and low-income students in certified Linked Learning pathways have higher graduation rates than their peers in traditional high schools and the state overall. Students in certified Linked Learning pathways also tend to earn more academic credit, overall and by student subgroups. They are more likely to be on track in the 10th grade to complete the minimum course requirements for the state’s public university systems (see sidebar) than their counterparts in traditional high school settings. And, they are more likely to report feeling that high school has helped them improve their collaboration and communication skills and their sense of personal responsibility.

While these results are encouraging, students in Linked Learning pathways do not perform better on standardized achievement tests than comparison students. And more research is needed to determine if the vast majority of students in Linked Learning pathways are truly college and career ready. The district leaders we talked to understand that to assure genuine readiness they have to carefully integrate their Linked Learning work—work that got underway before the new standards were even adopted—with the new standards themselves. But they also believe that the reverse is true: that without Linked Learning, they don’t have a good vehicle for bringing the new standards to life in real classrooms.

CALIFORNIA UNIVERSITY SYSTEM COURSE SUBJECT REQUIREMENTS
Students wishing to apply to a California State University or University of California campus must verify their completion of what are known as the “A–G” subject requirements – 15 college preparatory courses – over the course of their high school career. Each letter from “A” to “G” corresponds to a specific subject area: history/social science (A), English (B), mathematics (C), lab science (D), language other than English (E), visual and performing arts (F), and college-preparatory electives (G). Qualifying courses must be approved by the University of California. In order to be UC/CSU eligible, students must not only take the courses, but also pass them all with a grade of “C” or better, in addition to meeting minimum grade point average requirements and earning qualifying scores on college entrance exams.
DEVELOPING PERFORMANCE-BASED TASKS ALIGNED TO LEARNING AND TEACHING STANDARDS

The Behaviors of Learning and Teaching (BLT) Framework established by ConnectEd in 2013 specifies which behaviors students and teachers should demonstrate in well-implemented Linked Learning classrooms. Specific BLT expectations call for teachers to design interdisciplinary learning experiences, use industry specific technology, and articulate how students are mastering the Common Core State Standards. To align the BLT Framework with the new standards, some districts are creating alignment rubrics that line up each BLT component with the standards that correspond to them. This quick reference guide helps teachers remain aware of the intersections between the BLT Framework and the standards, and informs administrators about what evidence they should look for in classrooms to ensure all students are engaged and held to high expectations. As one district leader put it, “We need to look at BLT components in all classrooms. It is not just a pathway movement, but a movement for all.”

Though districts have adopted different approaches and have so far had varying degrees of success in ensuring teachers’ familiarity with and proficiency in the BLT Framework, many districts are making a deliberate effort to incorporate the BLT Framework in professional development designed for both pathway and non-pathway teachers.

DEVELOPING GRADUATE PROFILES ALIGNED TO COMMON CORE STANDARDS

Graduate profiles articulate what all students should know and be able to do by the time they graduate. Each of the nine Linked Learning districts in the Linked Learning District Initiative has undertaken a collaborative process to develop its own graduate profile, and many districts have created benchmarks for each grade level to ensure students are on track to graduate. As one district administrator put it, “Common Core is the ‘what,’ Linked Learning is the ‘how,’ and the graduate profile is the ‘why.’”

In many Linked Learning districts and schools, the graduate profile applies to all students, not just pathway students. This creates a common language for teachers, administrators, students and parents to discuss student success. Districts use graduate profiles and other strategies to support a standards-aligned Linked Learning approach to learning and teaching. See Appendix A for an example of a Common Core-aligned graduate profile that was created by West Contra Costa Unified School District, and page seven for additional strategies related to the graduate profile.
ALIGNING INTERDISCIPLINARY PATHWAY COURSES WITH THE NEW STANDARDS

Both Linked Learning and the Common Core lay out expectations for learning environments that are collaborative, inquiry-based, and focused on real-world application of skills and content. To this end, some districts are aligning their existing interdisciplinary pathway courses with the new standards and creating year-long assignments in which students develop, prototype, build, market and present a product related to their career pathway, such as building a windmill in an engineering pathway course. The different stages of the project are aligned with the new content and language standards and provide an opportunity for students to engage in project-based learning in a way that is relevant to their particular career pathway. Another example is in a school with a social justice pathway, where students in the senior class decide together to focus on a social issue they care about, study it through a philosophical framework, and develop strategies to address the issue in their community. Whether through product development or community service, students learn meaningful skills through standards-aligned projects.

RECONFIGURING PROFESSIONAL DEVELOPMENT

Building the capacity of both pathway and non-pathway teachers to implement Linked Learning and the new standards is key to student success. As one educator put it, “We want to have common language so that teachers do not see Common Core as something separate, but rather a complement to Linked Learning.” Districts are employing many different strategies for accomplishing this goal. First, when planning and rolling out professional development sessions, some districts are making an effort to align, or even combine, professional learning opportunities related to Common Core and Linked Learning. This includes giving pathway teachers time to fully understand the standards and affording technical education teachers the opportunity to learn about the Common Core. Some CLLDI districts include partners in the business community to participate in professional development, sharing with teachers what knowledge, skills and dispositions they hope to find in future graduates. Some business partners also work directly with pathway teachers to design projects with real-world connections.
PROVIDING STRUCTURED RELEASE TIME FOR TEACHERS TO COLLABORATE

Another strategy districts are employing to help teachers align Linked Learning and the new standards is to provide them with time to collaborate. During this collaboration time, teachers from different content areas within the same pathway plan and develop interdisciplinary projects and/or lessons. Teachers are working together to design key “essential questions,” develop formative assessments, and select supplemental curricular materials. One district is also using performance mapping, a process by which teachers work collaboratively to outline the content in each of their courses and discuss areas of overlap across the disciplines. Together teachers read the standards and develop interdisciplinary projects that address them.

ENSURING CONSISTENTLY RIGOROUS INSTRUCTION

Once teachers have the background knowledge and preparation to integrate Linked Learning and the new standards, the classroom is where everything comes to life. However what is expected of students can vary from classroom to classroom. In order for Linked Learning and the new standards to be fully successful, every student needs consistent access to rigorous coursework and high expectations. This is true for both Linked Learning pathway students and non-pathway students. To capture and disseminate the work teachers are doing to develop lessons and curricula, one district has created a “project bank” that pathway and non-pathway teachers alike can access to use or adapt project-based lessons aligned with the Common Core.

In addition, teachers and district staff in many Linked Learning districts are spending time reviewing the standards, curricula, and lesson plans to make sure there is a logical progression of content and access to a rigorous curriculum at each grade level.
CREATING COHERENT SYSTEMS AND STRUCTURES

Districts that are in the process of aligning Linked Learning and the new standards are paying careful attention to the systemic changes and essential structures needed to set teachers and students up for success. The graduate profile is one example of a systemic tool that aims to get everyone in a given district to hold the same high expectations for all students. Several districts are using the graduate profile as the centerpiece of their Common Core implementation efforts, articulating how Common Core standards help students achieve the expectations in the graduate profile.

Another example of coherent systems and structures is establishing expanded learning time and opportunities for students within and beyond the school day that are aligned with their classroom experiences. Some districts and schools engage students in after-school opportunities that are tied to their Linked Learning pathway themes. In one school, for instance, students attend an after-school media program that helps them make a positive impact on their community through public service announcements they create while reinforcing the skills they are learning in their multimedia academy. In another example, 11th and 12th graders enrolled in a health-themed academy gain valuable experience through required after-school internships at local hospitals and other medical facilities. Students get the most out of their Linked Learning pathways when the adults supporting them during and after school have structured opportunities to coordinate and learn together.

CLEAR AND CONSISTENT COMMUNICATION

Another key to aligning Linked Learning and the new standards is developing tools and structures that facilitate the use of common language across the district. For example, one district has defined student, project and pathway outcomes so that teachers have a common language and understanding of what is expected in each class and grade level. In addition, coaches strive to model consistent language in professional development sessions to help reinforce shared vocabulary around teaching and learning.

Another Linked Learning district holds regular meetings to facilitate communication between district leadership, principals, and pathway teams. Agendas and notes are shared to ensure transparency between different stakeholders and clear channels of communication across different levels of the district. Their meeting structure also helps to facilitate collaboration between school sites and the district offices, an essential activity for the smooth implementation of the new standards.
LOOKING AHEAD

Implementation of the Common Core in tandem with Linked Learning is very much a work in progress in districts across the state, but promising practices are emerging that can help guide other districts in their implementation efforts. For example, one area that will likely be a focus for many districts is the development of formative assessments and performance tasks that are aligned to Common Core and the Next Generation Science Standards. In addition, some districts are aligning their Local Control Funding Formula dollars with the priorities set forth in their Local Control Accountability Plans and creating coherence between the aligned priorities, such as expanding pathway programs, providing supports for English learners, and implementing Common Core–aligned curricula. While districts take on the big job of delivering on the promises of the new standards, implementation will not be without its challenges:

CHALLENGES

• Securing teacher expertise and dedicated time to plan, execute, and assess a Common Core–aligned Linked Learning pathway curriculum
• Finding time and resources to facilitate collaboration and lesson sharing between and among pathway and non-pathway teachers
• Facilitating the articulation of learning goals within and across grade levels, and guaranteeing that all students experience consistent rigor from classroom to classroom
• Ensuring students are able to apply what they learn in a real-world context
• Providing adequate and appropriate instructional materials
• Getting everyone in a school system to communicate and work together towards common goals
• Providing ongoing professional development for teachers across subject areas and pathways
• Demonstrating to teachers that the implementation efforts for California’s new standards and Linked Learning are interdependent
• Securing strong business and community partnerships across pathway programs and ensuring all partners are aware of the new standards
• Guaranteeing all students have access to necessary language scaffolds and academic discourse that builds English fluency

These challenges are not insurmountable with thoughtful investments of time, expertise, and capacity to implement the new standards in the Linked Learning context. The following recommendations are designed to help create the conditions for students to thrive in Linked Learning pathways, and to address the challenges schools and districts may encounter.

DISTRICT-LEVEL RECOMMENDATIONS

• Ensure professional development for pathway and non-pathway teachers is aligned and provide opportunities for all teachers to collaborate across districts, schools, pathway programs, content areas, and grade levels
• Maintain a consistent and clear structure for communication among district departments and school sites regarding standards implementation
• Build on teachers’ existing expertise to develop new curricula and lesson plans that exemplify the synergy between Common Core and Linked Learning
• Use existing tools to demonstrate connections between Linked Learning and the new standards
• Provide opportunities for teachers to visit exemplary Linked Learning classrooms in order to support ongoing professional learning, collaboration, and a focus on rigor
• Maintain a robust dialogue between teachers and industry experts in order to maximize opportunities to support and achieve student learning outcomes
• Ensure pathway students requiring additional scaffolding or supports, such as English learners and students with special needs, get what they need to access Common Core-aligned and/or project-based lessons
• Review student outcomes data to determine how equitably students are accessing and excelling in pathway programs and use data to make informed decisions about staffing, curricula and interventions
CONCLUSION

California is positioned to dramatically change the face of teaching and learning at the high school level with the simultaneous adoption of new standards and the expansion of Linked Learning to more schools and districts through the AB 790 initiative. Already over 60 additional districts across the state beyond the initial California Linked Learning District Initiative districts have embraced Linked Learning as a promising approach to preparing students for college and beyond. It is especially important to seize the opportunity to increase the rigor and relevance for high-need student populations and to ensure all students have access to college and career opportunities.

Early studies indicate that the Linked Learning approach holds promise for improving academic outcomes and engaging students in relevant, interdisciplinary learning opportunities that are tied to real workplace contexts. However, we will not know the extent of the alignment between Linked Learning and the Common Core until we analyze the results from the new state-adopted Smarter Balanced assessments and continue to look closely at the assignments students are given to ensure all students are held to high expectations and are being adequately prepared for college and career. We expect the quality of implementing the new standards and Linked Learning principles to vary across districts. We hope to see districts engaged in continuous improvement and continually tracking the needs of families, staff and students. Additional research on both local policies and practices related to the alignment of Linked Learning and the new standards is needed to further accelerate the integrations of these reforms. Providing districts with the necessary resources, support, and guidance needed to integrate Linked Learning with the new standards will put California’s students on a path to college and career success.
APPENDIX A: GRADUATE PROFILE

WEST CONTRA COSTA UNIFIED SCHOOL DISTRICT

THE WCCUSD GRADUATE IS A(N):

**Self-Directed Learner:** Independently seeks and uses resources including teachers, peers, print and digital references to engage in new learning toward academic, professional, and personal goals.

**Skilled Communicator:** Listens, comprehends, critiques, and communicates effectively by adapting to audience, task, purpose, and discipline. Refines and applies core content knowledge through speaking and writing.

**Effective Collaborator:** Works in teams to share ideas and responsibilities, solve problems, and achieve shared goals.

**Innovative Thinker:** Thinks critically and creatively by making claims, assessing evidence and solutions and draws on multiple perspectives when approaching complex issues and adapting to challenges.

**Quality Producer:** Consistently produces high quality academic and professional products and performances that model reflection and revision, persistence and accountability.

**Responsible World Citizen:** Exercises the rights and obligations of citizenship, engages in the local and global community through application of content knowledge and cultural awareness. Seeks to understand other perspectives.

**Proficient User of Digital Media and Technology:** Ethically and thoughtfully employs digital media and technology to analyze, organize and process content to create quality products and performances.

**Health & Wellness Advocate:** Demonstrates a commitment to the physical and mental health of self and others through interpretation and application of a wide range of health information and practices.
# GRADUATE PROFILE ALIGNMENT MAP

ELA Common Core State Standards (CC ELA) College and Career Ready Descriptors (pg. 7); Mathematics Common Core State Standards: Standards for Mathematical Practice (CC Math) & Partnership for 21st Century Skills Framework (P21)

| Self-Directed Learner: Independently seeks and uses resources including teachers, peers, print and digital references to engage in new learning toward academic, professional, and personal goals. | • They demonstrate independence – CC ELA  
• Initiative and Self-Direction – P21  
• Make sense of problems and persevere in solving them – CC Math  
• Use appropriate tools strategically – CC Math |
|---|---|
| Skilled Communicator: Listens, comprehends, critiques, and communicates effectively by adapting to audience, task, purpose, and discipline. Refines and applies core content knowledge through speaking and writing. | • They respond to the varying demands of audience, task, purpose, and discipline – CC ELA  
• They come to understand other perspectives and cultures – CC ELA  
• They build strong content knowledge – CC ELA  
• They comprehend as well as critique – CC ELA  
• Attend to precision – CC Math  
• Look for and make use of structure – CC Math  
• Look for and express regularity in repeated reasoning – CC Math |
| Effective Collaborator: Works in teams to share ideas and responsibilities, solve problems, and achieve shared goals. | • They respond to the varying demands of audience, task, purpose, and discipline – CC ELA  
• They come to understand other perspectives and cultures – CC ELA  
• Construct viable arguments and critique the reasoning of others – CC Math  
• Look for and make use of structure – CC Math |
| Innovative Thinker: Thinks critically and creatively by making claims, assessing evidence and solutions and draws on multiple perspectives when approaching complex issues and adapting to challenges. | • Innovation, Critical Thinking and Problem Solving – P21  
• They value evidence – CC ELA  
• Make sense of problems and persevere in solving them – CC Math  
• Reason abstractly and quantitatively – CC Math  
• Model with mathematics – CC Math  
• Look for and make use of structure – CC Math |
| Quality Producer: Consistently produces high quality academic and professional products and performances that model reflection and revision, persistence and accountability. | • Productivity and Accountability – P21  
• Attend to precision – CC Math  
• Model with mathematics – CC Math  
• Look for and express regularity in repeated reasoning – CC Math |
| Responsible World Citizen: Exercises the rights and obligations of citizenship, engages in the local and global community through application of content knowledge and cultural awareness. Seeks to understand other perspectives. | • They come to understand other perspectives and cultures – CC ELA  
• They build strong content knowledge – CC ELA  
• Global Awareness, Civic Literacy – P21  
• Construct viable arguments and critique the reasoning of others – CC Math  
• Look for and make use of structure – CC Math |
| Proficient User of Digital Media and Technology: Ethically and thoughtfully employs digital media and technology to analyze, organize and process content to create quality products and performances. | • They use technology and digital media strategically and capably – CC ELA  
• Use appropriate tools strategically – CC Math  
• Model with mathematics – CC Math |
| Health & Wellness Advocate: Demonstrates a commitment to the physical and mental health of self and others through interpretation and application of a wide range of health information and practices. | • Health Literacy – P21  
* The City of Richmond, California Health in All Policy Strategy (HiAP) & Ordinance |
OUR MISSION

The Education Trust–West works for the high academic achievement of all students at all levels, pre-k through college. We expose opportunity and achievement gaps that separate students of color and low-income students from other youth, and we identify and advocate for the strategies that will forever close those gaps.

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