The Linked Learning Advantage: Using Linked Learning to Implement the Common Core State Standards

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About this Brief

This brief examines the Common Core State Standards and their implications for Linked Learning, an innovative high school reform approach in California that prepares students for college and career by connecting learning in the classroom with real-world applications outside of school. This brief aims to address the ways in which the common standards align with and can be adopted by Linked Learning teachers, schools, and districts to ensure that all their students are ready for success in college, careers, and citizenship. This work is made possible through generous support from the James Irvine Foundation.

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Linked Learning is the vehicle with the most promise to implement the challenging Common Core State Standards at the high school level…[and] lead to increased student engagement and achievement. The Common Core is the "what"; Linked Learning [is] the "how." Both share the same "end in mind" — which is students who are college and career ready.

—Pamela Seki, Director, Curriculum, Instruction, & Professional Development, Long Beach Unified School District

Currently, 45 states (California among them) and three territories have signed a memorandum of agreement with the National Governors Association and the Council of Chief State School Officers committing to a state-led initiative that establishes educational standards for college and career readiness. This initiative—the Common Core State Standards Initiative—defines what each student should know and be able to do from kindergarten through 12th grade in order to graduate high school and succeed in entry-level, credit-bearing academic college courses as well as entry-level jobs and workforce training programs. Currently, the Common Core State Standards are available in two subject areas: English/language arts (ELA) and mathematics. A draft of the common standards for science was released in Spring 2012 for public comment and is currently being revised for a second public review in fall 2012.

The Implications of the Common Core State Standards for Linked Learning

Before the common standards were established, Linked Learning was taking hold as a strategy for high school reform in California through the California Linked Learning District Initiative. This initiative supports nine districts statewide that are developing a system of high-quality, career-themed pathways to better prepare students for college and career.

Enrollment in a Linked Learning pathway provides students with a four-year program of study that integrates academic content with technical and 21st century skills within a career theme. Linked Learning pathways include four major components:

1. a college-prep academic core emphasizing real-world applications,
2. a technical core of four or more courses meeting industry standards,
3. work-based learning, and
4. student supports (academic, emotional and social, college and career guidance).

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Linked Learning provides a variety of real-world contexts for teaching rigorous academic and technical content, making learning far more meaningful and relevant for students.

For teachers and administrators already engaged in Linked Learning, the idea of also adopting the common standards may seem daunting, but Linked Learning connects, supports, and aligns with the Common Core in several ways, chief among them:

1. a shared vision of college and career readiness and alignment of student learning outcomes;

2. compatible approaches to curriculum, instruction, and assessment;

3. real-world integration and application of academic and technical skills and knowledge; and

4. authentic demonstrations of learning through student performance assessment.

Shared Vision of College and Career Readiness

A common concern of Linked Learning educators is the extent to which the Common Core standards align with grade-level benchmarks and graduate outcomes that districts, schools, and pathways may have already developed. Another concern is that the new standards will consume the attention of their districts, derailing progress or even throwing out previous Linked Learning work. In reality, these concerns are simply a leadership and change management challenge. Linked Learning and the Common Core are not mutually exclusive, they are complementary. Given their mutual emphasis on real-world applications of knowledge and skills, Linked Learning is the ideal "how" to deliver the "what" of the Common Core.

From the Common Core to the Linked Learning context, there is strong alignment around the articulation of student outcomes (see Table 1, page 3). For example, language from the "Speaking and Listening" ELA standard for Common Core is similarly phrased in the Linked Learning College and Career Readiness Framework. The table also shows close alignment in the way that the Arts, Entertainment, and Media Pathway (AEM) not only articulates a similar focus on their Pathway Student Learning Outcomes but also maps those outcomes to different grade levels.

Many Linked Learning pathways develop pathway-specific student learning outcomes that are aligned with their district's overall student outcomes and graduate profile. This process of upward alignment offers Linked Learning teachers an advantage in mapping their student outcomes to the Common Core.

Compatible Approaches to Curriculum, Instruction, and Assessment

The adoption of the common standards will require teachers to make a series of instructional shifts. Far from starting from scratch, many teachers in Linked Learning pathways have already begun to make the necessary changes in instruction, curriculum, and assessment through the utilization of problem- and project-based learning. For many pathway teachers, the applied learning focus in projects will actually facilitate the integration of the standards into performance task criteria.

Tables 2 and 3 (on pages 4 and 5) describe how the instructional shifts outlined in the Common Core are applied within Linked Learning pathways. In both English language arts (Table 2, page 4) and in mathematics (Table 3, page 5) there are six instructional shifts that teachers must make.

As the tables illustrate, in many instances pathway teachers have already made the shifts required by the Common Core because the Linked Learning approach to curriculum, instruction, and assessment has required similar shifts in practice. These teachers will have an advantage in the transition to the standards over teachers utilizing more traditional instructional practices.

Real-world Application of Academic and Technical Skills Through Work-Based Learning

Central to both the Common Core and Linked Learning is the belief that students gain deep un-

Table 1
Alignment of the Common Core, College and Career Readiness Framework, and Student Learning Outcomes from a Linked Learning Pathway
An Example from English Language Arts, Speaking and Listening, Grade 9-10

The Common Core State Standards (2010) *Under the ELA Standards, Speaking and Listening is broken down into two areas: 1) Comprehension and Collaboration and 2) Presentation of Knowledge and Ideas.*	Linked Learning's College and Career Readiness Framework (2012) *Communication is a key 21st century skill identified in the framework.*	Linked Learning Pathway Student Learning Outcomes Example (2012) *This example is from John Muir High School's Arts, Entertainment, and Media (AEM) Pathway.*
"Presentation of Knowledge and Ideas" Defined as: • SL.9-10.4. Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task. • SL.9-10.5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. • SL.9-10.6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	**"Communication: Listening, speaking, writing, and nonverbal communication"** Defined as: • Using active listening skills to obtain and clarify information • Articulating thoughts and ideas clearly and effectively • Public speaking skills • Written communication, including memos, letters, and complex technical reports that are clear and effective	**"Communication: The AEM graduate interprets, organizes, composes, and articulates ideas that artfully communicate content knowledge and global perspectives."** Translation to grade-level benchmarks: • 9th/10th: Upon completing 10th grade, the AEM student composes and presents organized presentations as well as improvised oral responses that clearly articulate their ideas. • 11th/12th: Upon graduation, the AEM student exhibits confidence in both written and improvised oral presentations to articulate idea with impactful results.

derstanding when they apply content and higher-order thinking skills such as analysis and problem-solving related to the real world. Work-based learning, a key component of Linked Learning but uncommon in traditional high schools, allows students to experience the workplace firsthand and to apply the content and skills learned in both their academic and technical courses. The design and content of work-based learning offer fertile ground for the integration of the common standards. High quality work-based learning experiences integrate Common Core standards and college and career ready outcomes, and include employer assessments of students' proficiency. Far from a "nice to have" or

Table 2
Common Core Instructional Shifts for English Language Arts/Literacy

Common Core Instructional Shift	Applying the Shift in Linked Learning
Balancing informational and literary text	Career themes and technical coursework provide highly engaging and relevant contexts for students to read, be challenged by, and comprehend demanding informational text.
Building knowledge in the disciplines	Teacher collaboration, student cohorts, and the establishment of common student learning outcomes in pathways allow teachers to align literacy building strategies and responsibilities across the subject areas for specific projects and throughout the year.
Staircase of complexity	Projects with real world tasks create engaging opportunities that motivate students, even those reading below grade level, to persist with challenging central texts. Projects go in depth, instead of skimming the surface, and allow time for teachers to design scaffolds that provide differentiated support so that all students can be successful.
Text-based answers	Pathway themes provide engaging and authentic contexts for text-based discussions involving expository and literary sources in which students may have established more shared background knowledge to assist both their understanding and articulation of ideas. Examples include mock trials in law and justice academies or design presentations in engineering and architecture academies.
Writing from sources	Students regularly produce writing for a range of engaging and more authentic purposes related to the theme of Linked Learning pathways. This writing is frequently presented to and assessed by an audience around specific criteria.
Academic vocabulary	Academic and technical education teachers in Linked Learning pathways can regularly collaborate to reinforce the consistent use by students of key academic and technical vocabulary necessary for college and career success.

"additional" activity, Linked Learning's work-based approach is a powerful accelerant of student proficiency and an instructional strategy for integrating the standards into engaging learning experiences for students.

Looking Ahead: Next Steps and Strategies for Districts

The expansion of Linked Learning pathways is providing promising opportunities for all students to learn and demonstrate the common standards in highly engaging, real-world contexts. By working together, schools and districts can effectively leverage Linked Learning as a primary vehicle to ensure student success with the standards. A summary of strategies recommended by Achieve (2012) to bridge the divide between college preparation and career readiness is shown below. Table 4 on page 6 shows how Linked Learning districts have translated these strategies into actions.

Table 3
Common Core Instructional Shifts for Mathematics

Common Core Instructional Shift	Applying the Shift in Linked Learning
Focus	Linked Learning pathways focus outcome-based and student-centered instruction. Student learning is monitored through formative and summative student performance assessments that measure the key concepts that students have learned to mastery, rather than how many topics teachers have covered.
Coherence	Teacher teams in Linked Learning pathways collaborate together to provide multidisciplinary learning opportunities for students. Use of mathematics and mathematical practices purposefully extends out to other classrooms.
Fluency	The thematic approach of career pathways allows mathematics teachers to continually spiral back to foundational skills and concepts. Students have multiple opportunities to practice in a variety of contexts until key mathematics can be performed with speed and accuracy.
Deep understanding	Complex, industry-based problems provide opportunities in which students are required to use mathematics in new situations and persist through extended problem-solving scenarios.
Applications	Real-world projects offer open-ended contexts in which students must make independent determinations about when and how mathematics should be applied and what mathematical approaches will best serve to solve a problem.
Dual intensity	Students engage in multidisciplinary projects where foundational mathematics skills can be learned and practiced to fluency within the math classroom, and are then applied to larger, novel problems that span multiple classes.

District Support for Teachers

Districts will need to design professional development programs to provide teachers at all grade levels and in all content areas with a deep understanding of the CCSS as they begin to make the necessary shifts in instruction, curriculum, and assessment. Capacity-building activities that help teachers with the process of change include:

- cross-walking standards at different levels of the system in order to align the Common Core with state, district, and school-level student outcomes;
- supporting teachers to make meaning of each standard by unpacking its content to clearly understand what is being asked of the student, the level of cognitive demand, and the types of tasks and activities by which students can effectively demonstrate the standard;
- creating or adopting instructional frameworks to guide teams in their disciplinary and interdisciplinary curriculum and planning; and
- developing prototypes of performance assessments for interdisciplinary projects that are mapped to the Common Core, student learning outcomes, and graduate profiles.

Table 4
Common Core State Standards & Linked Learning
Integration Strategies for Districts

Strategies	Suggested Actions
1. Develop a common understanding of college and career readiness	• Continue messaging around vision of college and career readiness • Make vision concrete by developing district graduate outcomes (graduate profile) • Align graduate profile with the common standards
2. Ramp up communications and information sharing	• Increase awareness of the alignment and synergy of the Common Core State Standards and Linked Learning
3. Form cross-disciplinary teams for common core planning and implementation	• Continue organizing pathways into cross-disciplinary teams • Build and recruit teacher leadership from within pathways • Foster Career & Technical Education (CTE) and academic teacher collaboration
4. Foster CTE and academic teacher collaboration	• Ensure pathway structures enable collaboration between CTE and academic teachers • Encourage CTE to integrate academic content into curriculum
5. Create or update curricular and instructional resources	• Conduct crosswalks between school-level student learning outcomes, district graduate profile, and the common core (starting with the common core)
6. Enhance literacy and math strategies within CTE and academic content instruction	• Districts can create curricular and instructional resources to guide development of interdisciplinary projects and curriculum that integrates CTE and academic content
7. Involve postsecondary CTE business in common core implementation	• Familiarize business and post-secondary partners with the common core so they can address them in their presentations, site visits, and teacher externships

Teachers will need support in performance task design, and in "backwards mapping" their curriculum from the assessment tasks they have identified or created for students to demonstrate attainment of a level of performance on one or more Common Core standard(s). The greatest challenge here will be helping teachers to successfully differentiate and scaffold instruction for diverse learners, including those learning English as a second language. The interdisciplinary, collaborative structures and culture of Linked Learning pathways directly support accelerated teacher learning and skill development, which is essential to implementing the necessary shifts in instruction, curriculum, and assessment.

The new Common Core assessments being developed by the Smarter Balanced Assessment

Consortium (SBAC) and the Partnership for Assessment of Readiness for College and Careers (PARCC) feature many components of well-designed systems of authentic performance assessment. As districts look ahead to the assessments that schools will need, the SBAC and PARCC assessments can offer models and examples of performance-based assessment systems that Linked Learning pathways and districts are striving to build. These systems of student assessment already incorporate much of the Common Core content concerning existing alignment of standards, skills, and outcomes. Students in Linked Learning pathways won't have to wait for the state assessments to get the opportunity to show what they know and are able to do for college and career readiness.

Conclusion

The important ways in which Linked Learning connects with the Common Core State Standards — a common vision for college and career readiness; compatible approaches to instruction, curriculum, and assessment; and a shared emphasis on the relevant and real world application of learning — puts those teachers implementing Linked Learning in an advantageous position, having already begun the complex work that other districts and schools are just beginning to think about. Indeed, one lesson of this brief is that teachers, principals, and superintendents seeking a solution for secondary education that engages students and better prepares them to succeed with the Common Core State Standards would be well advised to take a look at Linked Learning.

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