WHY DEEPER LEARNING?
The U. S. education system must prepare students to be engaged citizens and to succeed in the high-skilled jobs that are increasingly required in the global economy. To meet these demands, students will need "deeper learning," a mix of knowledge, skills, and dispositions that include critical thinking and problem solving, effective communication, collaboration, an academic mindset, and the ability to learn how to learn – all applied to the mastery of academic content.

WHAT IS THE DEEPER LEARNING NETWORK?
A national “Deeper Learning Network” of more than 500 schools is delivering deeper learning to students in forty-one states. Composed of ten school networks it collectively serves more than 227,000 students, most of whom are low-income minority students. Each school network has a unique approach, but all foster the deeper learning skills that prepare young people for economic and civic success.

www.deeperlearning4all.org

Linked Learning is an approach that uses "pathways" to help students of all abilities connect learning to their interests and career goals. A pathway spans grades nine to twelve, connects high school and postsecondary institutions to ensure a smooth transition after graduation, and integrates rigorous academic instruction with demanding technical curriculum and field-based learning. Pathways are developed around industry sectors, such as business and finance, building and environmental design, biomedical and health sciences, or arts, media, and entertainment.

A STRUCTURED APPROACH THAT SUPPORTS STUDENTS AND TEACHERS
By integrating “rigor, relevance, and relationships” into the pathways, Linked Learning melds strong academics, technical education relevant to the student’s chosen career path, and real-world experiences which allow students to develop relationships with teachers and community mentors focused on career goals. Most pathways limit the number of students to 250–500 so that teaching is individualized, and struggling students are identified and helped. Many pathways adopt a flexible schedule that allows more time for in-depth labs and Project-Based Learning, longer classes, extra tutoring for students that are behind, work-based learning experiences, and common preparation time for teams of teachers to develop integrated curricula and work with employers and students. Schools that use Linked Learning pathways train and motivate teachers and school leaders so they can develop partnerships with local industry and business to inform curriculum and support work-based learning. Linked Learning supports the development and operation of pathways at both the district and school levels, but it advocates for district-wide implementation as a way to change instruction and learning for all students.

DEEPER LEARNING IN ACTION
Porterville (California) Unified School District hosted an exhibition of student work titled Night at the Pathway Museum, where students showcased their Project-Based Learning and described how they deepened their content knowledge over the term of the project. Projects included robotics design, healthy diet and nutrition, and the design of buildings. Working in teams, students from nine Porterville high schools chose unresolved issues in the community they wanted to address. Then, with data culled mostly from local libraries, they formed conclusions and made recommendations for how to resolve the problems. Students collaborated in presenting their findings to an audience of outside reviewers who evaluated the student presentations using criteria which ensured that the projects addressed learning outcomes set by teachers. Students had an opportunity to showcase their content knowledge in various disciplines (English, math, science, and technical fields), and they were asked to explain what they learned and how they applied their knowledge to their project. Students explained the critical-thinking and problem-solving skills used to develop their conclusions during their presentations. A by-product of the exhibition is that more employers want to partner with the high schools and support the Linked Learning approach.
ConneCting ACAdemiCs to ReAl-WoRld AppliCAtions

The Linked Learning approach relies on teachers to connect theoretical knowledge and real-world applications in newly developed curricula. Teachers in Linked Learning pathways are given adequate time and support to plan and create standards-aligned, integrated, and multidisciplinary project-based instruction and assessments that help students make connections between book learning and real-life learning and to practice problem solving and critical thinking. For example, an engineering teacher who challenges students to design the shape and area for the most energy efficient blade for a wind turbine is reinforcing both the engineering and the geometry standards that students must master. Similarly, a geometry teacher who asks students to propose and defend their placement of blade angles for a wind turbine is helping students understand the geometry of angles and is making mathematics more relevant and understandable by using a real-world engineering context.

WoRk-BAsed expeRienCes

Linked Learning students have opportunities to connect what they learn in the classroom with work and careers. For example, a biology student enrolled in a health-care pathway might visit a local hospital or medical institute to learn about the science of stem cells or heart disease from scientists and doctors. Students experience the workplace in various ways, beginning in the early high school years with shadowing business partners to learn about their jobs and careers to engaging in real work with intensive internships in the upper grades. These work-based learning experiences allow students to build supportive relationships with adults and to develop problem-solving, communication, and collaboration skills, all necessary to succeed in the workplace and in college.

liNked leARning is WoRking

Schools that have adopted the Linked Learning approach have reported increased attendance rates, improved test scores, and decreased dropout rates than their non-pathway peers. Data collected by the Institute for Evidence-Based Change working directly with school districts shows that in two districts with four-year Linked Learning pathways, ninth grade pathway students fail fewer courses than their peers; 9 percent more Linked Learning students attend four-year postsecondary education institutions than their peers; tenth grade students enrolled in certified pathways are as much as 14 percent more likely than their peers to be on track to complete the California college entrance requirements; and according to data from the Stanford Research Institute, ninth and tenth grade Linked Learning students accumulate significantly more credits than their non-pathway peers.

Learn more about Linked Learning:
www.connectedcalifornia.org/linked_learning

* numbers reflect California only