Bringing Linked Learning to Life Through Integrated Project Design

A Linked Learning Alliance Learning Series
Welcome
Introductions

Esther Soliman
Linked Learning Administrator, Los Angeles USD

Rebecca Lacocque,
Linked Learning Director, Oakland USD

Diane Walker
Linked Learning District Coach, Antelope Valley UHSD

Cheryl Hibbeln
IlluminatED Collective
Agenda

Highlight partnership success stories

Address challenges in the field
Interactive Opportunities in the Chat

Questions
Build on presented ideas
Share links to district resources connected to project-based learning strategies
Challenges in the Field

Alignment of common core standards and industry standards

Alignment of work-based learning in project-based learning efforts
Project-Based Learning in a Linked Learning Context
Los Angeles Unified School District
Student Graduate Profile

Los Angeles Unified School District is dedicated to producing graduates who possess the knowledge, skills, and attributes students should have and will demonstrate when they reach adulthood, ready for work, college, and life. The Graduation Profile, in conjunction with the state’s state of assessment and accountability system, is informed by the District Local Control Accountability Plan (LCAP).

LA Unified graduates will demonstrate...

Self-Advocacy
- Exhibit knowledge and skills to succeed in a career pathway
- Achieve short and long-term goals and deadlines
- Capitalize on personal, community, and professional resources

Adaptability
- Think critically, set creatively, and innovate effectively
- Employ a reflective, flexible, and resilient mindset
- Welcome and apply feedback for improvement

Open-Mindedness and Ethics
- Understand the perspectives of others
- Be critical consumers of information
- Act in a productive manner to advance personal ethics and beliefs

Effective Communication
- Use multiple mediums and languages effectively
- Collaborate productively to achieve shared goals
- Engage in purposeful interactions

LA Unified students will graduate with a personal and professional growth plan to capitalize on their strengths and address their areas of growth.
Los Angeles Unified School District

**MAJOR CHALLENGE:** Deepen the rigor and complexity of our PBLs

**Solution:**

- Created *Task Quality Criteria* for Multiple Subject Performance Assessments (PBLs)
LAUSD Linked Learning Task Quality Criteria Tool for Multidisciplinary Projects

Pathway/School: ___________________ Grade: ______ Project: ________________________

**Criterion 1: Focus on Deeper Learning**

The rubric for the quality rating is as follows: 0-No Evidence; 1-Limited Evidence; 2-Partial Evidence; 3-Full Evidence.

<table>
<thead>
<tr>
<th>Quality Criteria</th>
<th>Quality Rating</th>
<th>Evidence or Rationale</th>
<th>Suggestions for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The standards (Common Core State Standards, Math Practices, and/or NGSS) selected for the project are clearly listed in a planning template, developmentally appropriate for target students, and aligned to grade level scope and sequence. Project components, resources/materials, and student products are aligned to the listed standards.</td>
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</tbody>
</table>
| b. The project provides opportunities for students to demonstrate evidence of important college readiness skills, including:  
  - Deeper learning competencies, such as analysis, argumentation, and problem solving.  
  - Requiring students to go beyond simple recall; eliciting evidence of complex student thinking and application of disciplinary or cross-disciplinary concepts, practices, and/or transferable skills. | | | |
| c. The project provides opportunities for students to demonstrate evidence of important college/ career readiness skills, including:  
  - Connection to career technical education standards.  
  - Application of district graduate profile and pathway student learning outcomes. | | | |

Adapted from SCALE and Virginia Quality Criteria Review Tool for Performance Assessments
Revised October 2019
### Criterion 2: Language Use and Expression

The rubric for the quality rating is as follows: 0-No Evidence; 1-Limited Evidence; 2-Partial Evidence; 3-Full Evidence.

<table>
<thead>
<tr>
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<th>Quality Rating</th>
<th>Evidence or Rationale</th>
<th>Suggestions for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>*a. The project requires students to use two or more forms of language expression to communicate their reasoning, such as:</td>
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<tr>
<td>• Essay, report, oral presentation</td>
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<tr>
<td>• Artistic (i.e. performance, digital media, artistic expression)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Graphs, charts, models</td>
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<tr>
<td>b. The project includes built-in scaffolds or instructional supports to help students access and use developmentally appropriate academic and disciplinary language.</td>
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</tr>
</tbody>
</table>

### Criterion 3: Authenticity and Alignment to Industry Sector

The rubric for the quality rating is as follows: 0-No Evidence; 1-Limited Evidence; 2-Partial Evidence; 3-Full Evidence.

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<th>Suggestions for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The project is authentic along the dimensions:</td>
<td></td>
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<tr>
<td>• The project topic, context (scenario), materials/resources, products, and purpose/audience are relevant to the real-world and potential careers, particularly in the pathway’s industry sector.</td>
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<tr>
<td>• The project asks students to do work authentic to the discipline and/or pathway’s industry sector.</td>
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<tr>
<td>*b. There are opportunities for students to share their product(s), process, and reflection to a public audience (i.e. community, professional partners, peers, etc.) in one or more of the following ways: presentation, film screening, call for, showcase, competition.</td>
<td></td>
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<tr>
<td>*c. The project bridges classroom learning to the industry by building in one or more opportunities for students to interact with industry professionals in any of the following ways: field trip, guest speaker, job shadowing, mentorship,</td>
<td></td>
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</tbody>
</table>
Los Angeles Unified School District

**MAJOR CHALLENGE:** Deepen the rigor and complexity of our PBLs

**Solution:**
Encourage reflection, revision, and annual repeat of PBL
Los Angeles Unified School District

**MAJOR CHALLENGE:** Deepen the rigor and complexity of our PBLs

**Solution:** Created rubrics to calibrate depth and complexity of writing: Analysis, Problem Solving, Argumentation
### Problem Solving Rubric

<table>
<thead>
<tr>
<th>Scoring Domain</th>
<th>Emerging</th>
<th>Developing</th>
<th>Proficient</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defining the Problem</strong></td>
<td>Begins to describe a simplified problem with imaginable descriptions of criteria or constraints.</td>
<td>Describes the problem components.</td>
<td>Describes the problem completely and includes a rationale.</td>
<td>Describes the problem thoroughly and presents, and includes a rationale.</td>
</tr>
<tr>
<td><strong>Applying Adaptive Problem-Solving Strategies</strong></td>
<td>Identifies a general approach to addressing the problem with minimal description of the tasks, procedures, or sequences.</td>
<td>Identifies and partially describes essential tasks, procedures, or strategies that somewhat addresses the problem.</td>
<td>Identifies and describes essential tasks, procedures, and/or strategies that address the problem.</td>
<td>Clearly identifies and thoroughly describes essential tasks, procedures, and/or strategies that address the problem.</td>
</tr>
<tr>
<td><strong>Interpreting Data and Information to Make Valid Claims</strong></td>
<td>Interprets data and information in a manner that is inconsistent with the claims.</td>
<td>Interprets data and information in a manner that is consistent with a phenomenon or solution.</td>
<td>Interprets data and information in a manner that is consistent with a phenomenon or solution.</td>
<td>Interprets and synthesizes data and information from varied sources to construct a logical argument about a phenomenon, model, or solution.</td>
</tr>
<tr>
<td><strong>Evaluating Possible Solutions</strong></td>
<td>Attempts to evaluate the merit of a solution to a problem by discussing the question of how the criteria or constraints of the problem, with minimal reference to evidence.</td>
<td>Evaluates the merit of a solution to a problem by summarizing how it meets specific criteria and constraints of the problem, with clear citations of evidence.</td>
<td>Evaluates competing solutions to a real-world problem using evidence and disciplinary ideas and principles.</td>
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</tr>
</tbody>
</table>

Adapted from the Two Rivers Public Charter School Rubric for Problem Solving and Seasonal Cognitive Skills Rubric.
MAJOR Challenge: Deepen the Rigor and Complexity of Our PBL

10th Grade Team

PITCH PANEL Consultancy Protocol helps a team to think more expansively about a concrete concern
Takeaways and Next Steps

• Pathways work with the entire team to solve dilemmas such as
  • Developing **authentic audiences**
  • Ensuring PBLs are **meaningful and serve a purpose**
  • PBLs are **complex and rigorous**
• Arrange for that tour bus!
• Develop a system for calibrating student artifacts in Portfolium
On your mind?
OUSD Students are...

- Community Leaders
- Creative Problem Solvers
- Critical Thinkers
- Collaborative Teammates
- Resilient Learners

College, Career, AND Community READY

OAKLAND UNIFIED SCHOOL DISTRICT
Community Schools, Thriving Students
## OUSD PBL Framework

| **Authenticity** | The project context reflects current societal problems and utilizes processes, tools, and technologies that reflect quality standards of the workplace. The product, service, or performance builds on students' assets, addresses an authentic community need, and has a measurable impact on the environment, people, and/or community/society. |
| **Key Knowledge, Understanding, Success Skills** | The project is planned backwards from key academic and career standards, including pathway student learning outcomes, frameworks and standards for CTE, CCSS, NGSS, history-social science, and ELA, and 21st century skills in the context of pathway theme. |
| **Challenging Problem or Question** | The project is organized to address a real world problem, community need, or open-ended question that is relevant and interesting to students and requires career-themed and disciplinary thinking and skills to answer. |
| **Sustained Inquiry** | The project involves ongoing student inquiry, which may address factors that lead to the problem, multiple perspectives on the problem, and ways to address this problem, including first understanding what has and is currently being done. |
| **Student Voice and Choice** | Project utilizes an inquiry-based approach where students have opportunities to express voice and choice on important matters (questions asked, texts and resources used, people to work with, products to be created, use of time, organization of tasks). Students have opportunities to take significant responsibility and work as independently from the teacher as is appropriate, with guidance. |
| **Collaboration** | Students have opportunities to organize, collaborate, and engage with each other, teachers, and/or industry and community partners. Industry-specific norms and strategies, democratic principles, and technology are used to make collaboration empowering, joyful, effective, and relevant. |
| **Reflection** | Students are provided with regular, structured opportunities for reflection both during the project and after its culmination in order to assess their own learning, make connections to other experiences, deepen their empathy for others, and determine the project's relevance to their lives. Reflection may focus on what and how students learn, progress towards project learning outcomes, the project's design and management, the impact on the identified need and community, as well as on student's developing civic identity (connectedness, consciousness, and agency). Teachers model practices of reflection and humility. |
| **Critique and Revision** | Students are provided with regular, structured opportunities to offer and receive thoughtful critique from peers, teachers, or others (when appropriate) about the project product and/or process, grounded in the project outcomes, standards, or rubric. Project timeline requires students to generate multiple iterations of their work informed by critique, models, or instruction in a trajectory towards increasingly meaningful and high quality work. |
| **Public Audience/Exhibition** | Project requires public exhibition outside the classroom where student work and learning processes are to be presented, questioned, and appreciated through structured and meaningful audience engagement. Along with the final performance or product, artifacts of the process are also displayed so as to demonstrate learning. |
### Project Overview

<table>
<thead>
<tr>
<th>Teachers:</th>
<th></th>
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<tbody>
<tr>
<td>Name of Project:</td>
<td>Duration:</td>
</tr>
<tr>
<td>Subjects/Courses:</td>
<td>Grade Level:</td>
</tr>
</tbody>
</table>

### Project Idea:
Summarize the project by describing how students will use career pathway aligned processes, tools, and/or technologies to produce a product, performance or action that addresses an authentic community need. (PBL Framework - Authenticity)

### Driving Question that can support sustained inquiry:
Please include a single driving question that applies to all involved disciplines AND is student-friendly (you can have a more complex one to guide your planning).

**DELETE** (information is for reference)
- Is open-ended; that is, it typically will not have a single, final, and correct answer.
- Is thought-provoking and intellectually engaging, often sparking discussion and debate.
- Calls for higher-order thinking, such as analysis, inference, evaluation, prediction.
- Points toward important, transferable ideas within (and sometimes across) disciplines.
- Recurs over time; that is, the question can and should be revisited again and again.

**Examples:** How have native peoples been impacted by changes in the world? How does the built environment affect the health of a community? How can humans address climate change?
Deep Community Partnerships Lead to Authentic Project-Based Learning at OUSD
Student Voice in Teacher Professional Learning

Young Whan Choi
Manager of Performance Assessments Oakland Unified School District in Oakland, CA

February 24, 2020
# Climate Impacts & Recommendations

<table>
<thead>
<tr>
<th>Climate Impact</th>
<th>Recommendation</th>
<th>Rationale</th>
</tr>
</thead>
</table>
| Extreme heat outdoors is a concern because students of all ages spend part of their day outdoors. | • Add benches that are covered by roofs of nearby buildings or have shade from trees  
• Add benches with covers over them  
• Cover some sections of bleachers on High School fields  
• Cover playgrounds with shade structures  
• Plant more Metrosideros excelsa or other fast growing "urban" or native trees | Provide cool places for students to sit outside  
Reduce fatigue, sunburn and other heat impacts when students play and exercise.  
Provide shade and improve air quality. Need to water until roots are developed. |
On your mind?
Challenge Meets Opportunity

- **Challenge**: Extension of high-quality PBL to cross-curricular teams outside of academies through the district
- **Framework** of existing project-based learning within academies
- **Opportunity**: Expanding higher-level work-based learning experiences for academy juniors and seniors
- **How do we marry the two efforts for the benefit of students?**
A District Approach to PBL and WBL

- PBL Training
- Integrated Curriculum
- Teams
- Ongoing PD

- Academy
- Integrated
- Projects

- CTE
- Work-Based Learning, Real-World Projects

Project
Genesis of a Project

• Lancaster HS Multimedia & Engineering Academy Showcase and Parent Night

• Parent in the audience with a real-world project - NASA Traveler (autonomous vehicle guidance)
Demonstration of Technology

- **Autonomous Missions**
  - STEM Demo - early 2017
    - *Science Technology Engineering & Math (STEM)*
    - **Goal**
      - Flight Outside of Restricted Airspace
    - **System Requirements**
      - Flight Executive
      - Geo-Fence (a priori data)
      - Ground & Obstacle Avoidance (a priori data)
      - Forced Landing System (a priori data)
      - Basic Mission Planner
      - Test Safety Monitor
  - ERM Demo - early 2018
    - *Emergency Response Mission (ERM)*
    - **Goal**
      - Fly a Portion of the Autonomous Mission without a Link or Safety Pilot
    - **Additional System Requirements**
      - Separation Assurance & Air Collision Avoidance
      - Active Sensing of Obstacles

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**CY16**

- System Development & Test

**CY17**

- STEM Demo
- Ph. 2 Systems Development
- ERM Demo

[https://ntrs.nasa.gov/search.jsp?R=20170005718](https://ntrs.nasa.gov/search.jsp?R=20170005718)
Real-World Relevance and Rigor

- Parent worked with site admin, the academy coordinator, and a teacher on structure (after-school class/club), curriculum and assessment
- Project was phased over three school years - incorporating and building upon skills from existing engineering courses
- Mentoring/project guidance from NASA employees
Industry Standards Aligned to GSP and SLO’s

- Collaborative teams (Flight Ops, Simulator, Controller, Media)
- Working on development of new autonomous guidance system
- Using industry-level software, project management tools and techniques
- Outcomes used in NASA project
Authentic Audience

• Community reveal of the project
• Presentation at AV Board of Trade Business Outlook Conference
Next Steps

• **Use common concepts to:**
  • Increase **rigor** and **frequency** of high-quality PBL across all programs
  • Increase **involvement of industry** in planning and evaluation
  • Expand **virtual** work-based learning
On your mind?