

Bringing Linked Learning to Life Through Integrated Project Design

A Linked Learning Alliance Learning Series

Welcome



Anne Stanton
President, Linked
Learning Alliance

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

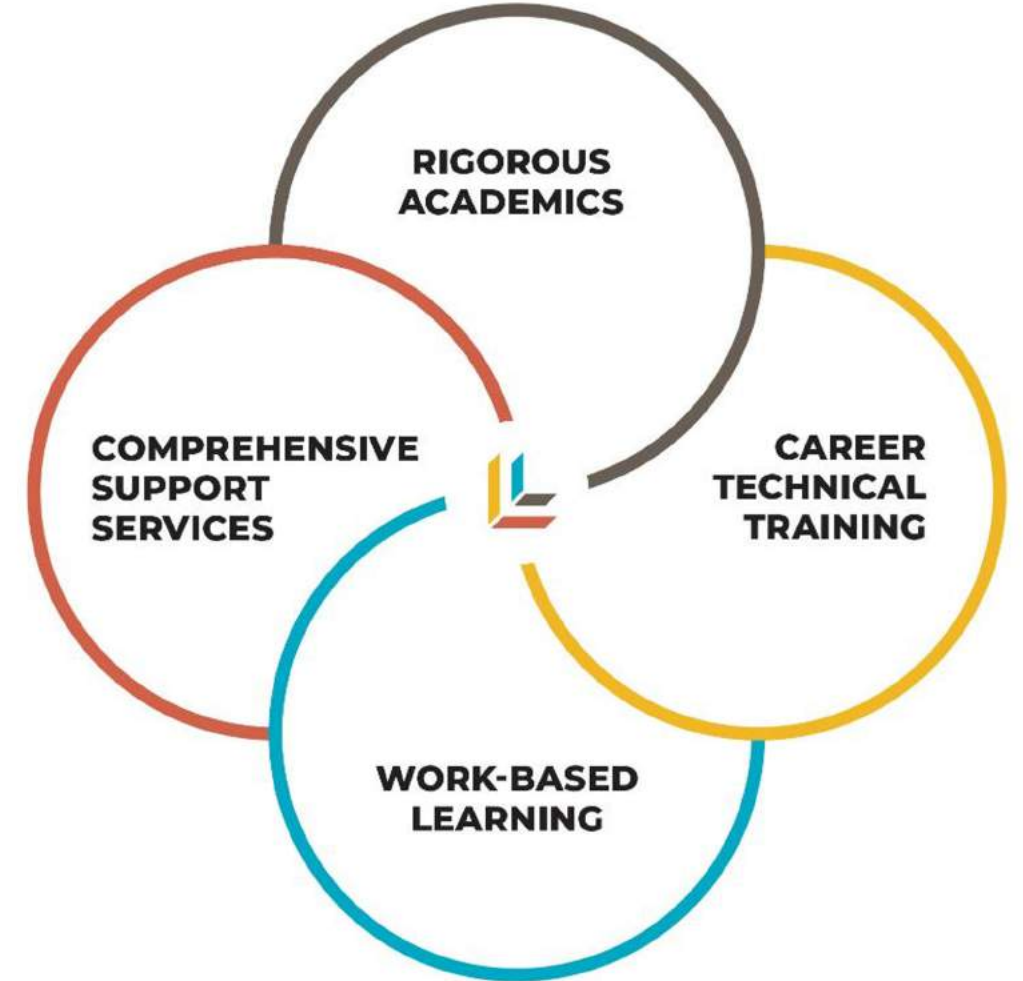
Share links to district resources connected to project-based learning strategies

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

The Graduate Profile defines the knowledge, skills, and attributes students should have and be able to demonstrate to show their readiness for college, career, and life. Once established, the Graduate Profile becomes the basis for a local system of assessment and accountability that complements the exam-driven state and federal accountability systems and informs the District's 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, act creatively, and innovate effectively
- Employ a reflective, flexible, and resilient mindset
- Welcome and apply feedback for improvement

DRAFT

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



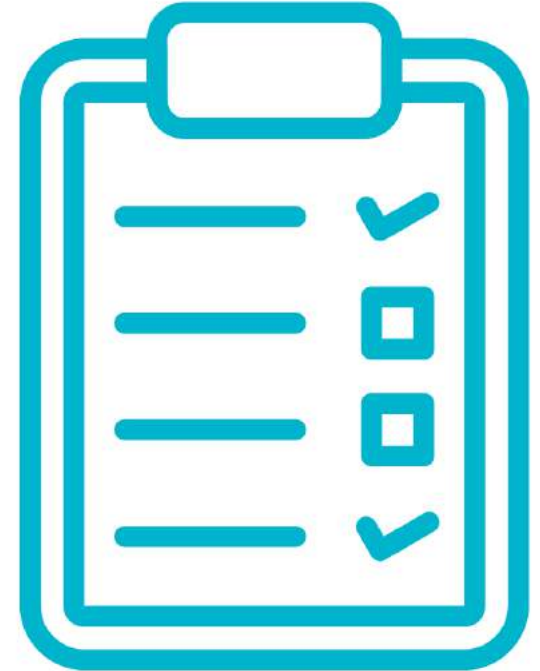
LA Unified students will graduate with a personal and professional growth plan to capitalize on their strengths and address their areas of growth.

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.

Quality Criteria	Quality Rating	Evidence or Rationale	Suggestions for Revision
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.			
b. The project provides opportunities for students to demonstrate evidence of important college readiness skills, including: <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">• 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 1

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.

Quality Criteria	Quality Rating	Evidence or Rationale	Suggestions for Revision
*a. The project requires students to use two or more forms of language expression to communicate their reasoning, such as: <ul style="list-style-type: none">• Essay, report, oral presentation• Artistic (i.e. performance, digital media, artistic expression).• Graphs, charts, models			
b. The project includes built-in scaffolds or instructional supports to help students access and use developmentally appropriate academic and disciplinary language.			

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.

Quality Criteria	Quality Rating	Evidence or Rationale	Suggestions for Revision
a. The project is authentic along the dimensions: <ul style="list-style-type: none">• 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.• The project asks students to do work authentic to the discipline and/or pathway's industry sector.			
*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, gallery, showcase, competition.			
*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,			

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

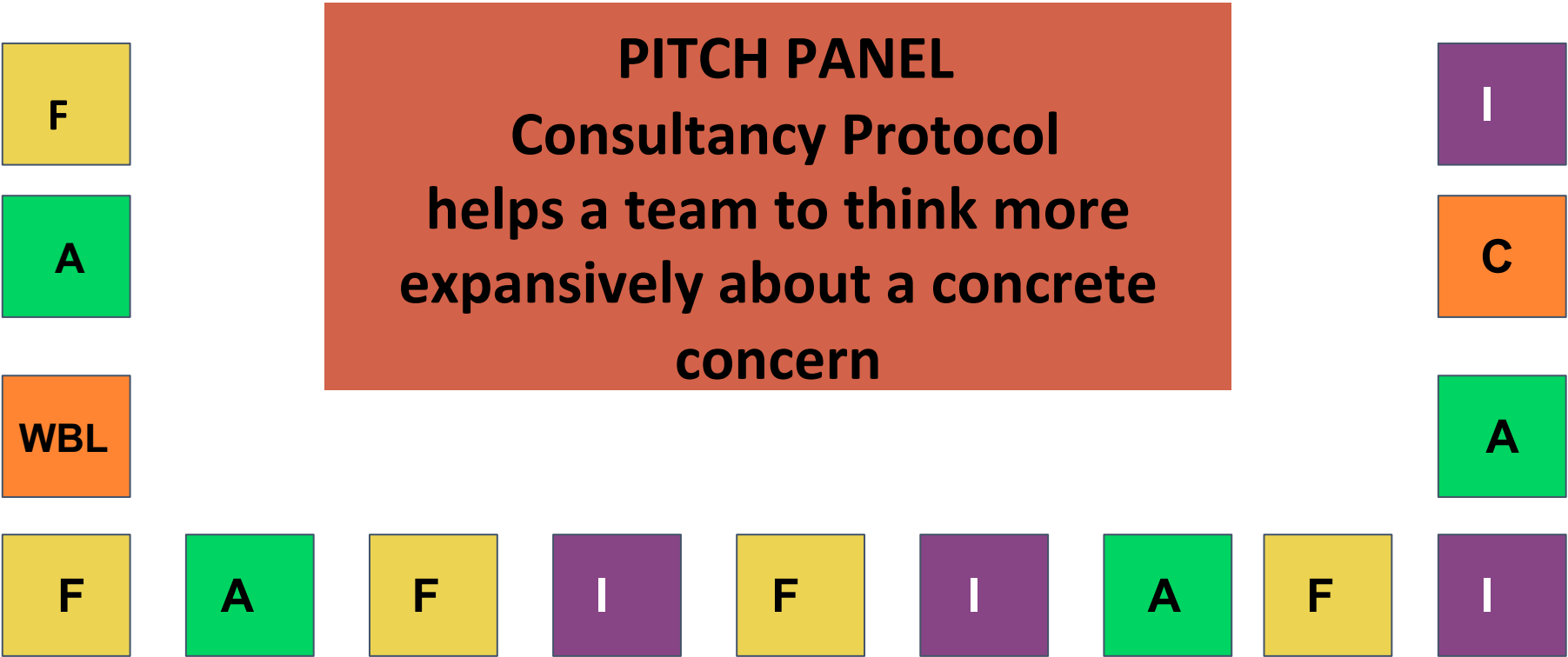
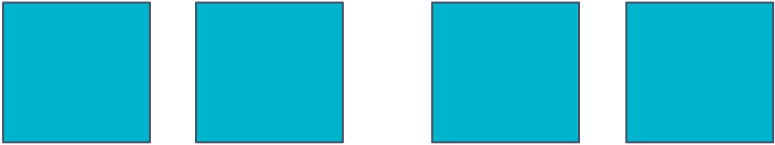
Scoring Domain	Emerging	Developing	Proficient	Advanced
Defining the Problem	<ul style="list-style-type: none"> Begins to describe a simplified problem with incomplete description of criteria or constraints. 	<ul style="list-style-type: none"> Describes the problem completely. Includes several criteria and practical constraints (e.g. materials, time, or cost). 	<ul style="list-style-type: none"> Describes the problem completely and includes a rationale. Addresses multiple criteria and constraints, including one or more social, technical, or scientific constraints relevant to the problem. 	<ul style="list-style-type: none"> Describes the problem thoroughly and precisely, and includes a rationale. Fully addresses criteria and relevant social, technical, and/or scientific constraints to the problem. When relevant, addresses unknown variables and raises relevant questions to more clearly define the problem.
Applying Adaptive Problem-Solving Strategies	<ul style="list-style-type: none"> Identifies a general approach to addressing the problem with minimal description of the tasks, procedures, or strategies. Sequences tasks in a way that limits ability to meet deadlines. 	<ul style="list-style-type: none"> Identifies and partially describes essential tasks, procedures, or strategies that somewhat addresses the problem. Lists some tools, instruments and resources. Adjusts schedule and approach without compelling reasons from external circumstances. 	<ul style="list-style-type: none"> Identifies and describes essential tasks, procedures, and/or strategies that address the problem. Identifies appropriate tools, instruments, and resources to support the problem-solving strategy. Adjusts the schedule and approach as required by circumstances while still completing by the final deadline. 	<ul style="list-style-type: none"> Clearly identifies and thoroughly describes essential tasks, procedures, and/or strategies that address the problem. Identifies and describes appropriate tools, instruments, and resources to support the problem-solving strategy. Makes adjustments to the schedule and approach as required by circumstances while still completing ahead of final deadline.
Interpreting Data and Information to Make Valid Claims	<ul style="list-style-type: none"> Interprets data and information inaccurately and/or inconsistently with the claims. 	<ul style="list-style-type: none"> Interprets data and information to generate claims about a phenomenon or solution. Discusses some limitations of the findings. 	<ul style="list-style-type: none"> Interprets data and information to generate accurate claims about a phenomenon, model, or solution. Discusses some possible sources of errors, limitations, and/or outliers. 	<ul style="list-style-type: none"> Interprets and synthesizes data and information from varied sources to generate credible and precise claims about a phenomenon, model, or solution. Discusses multiple possible sources of errors, limitations, and/or outliers.
Evaluating Possible Solutions	<ul style="list-style-type: none"> Attempts to evaluate the merit of a solution to a problem by discussing generally how it meets the criteria or constraints of the problem, with minimal reference to evidence. 	<ul style="list-style-type: none"> Evaluates the merit of a solution to a problem by discussing specific criteria and constraints of the problem, with clear citation of evidence. 	<ul style="list-style-type: none"> Evaluates competing solutions to a real-world problem using evidence and disciplinary ideas and principles. For the selected solution, explains whether evidence satisfies design criteria and constraints. 	<ul style="list-style-type: none"> Evaluates competing solutions to a real-world problem using evidence, disciplinary ideas and principles, and logical arguments that are based upon relevant factors (e.g. economic, societal, environmental, ethical, etc.). Explains how each solution answers the design criteria and satisfies the constraints. Explains limitations of each solution pathway.

Adapted from the Two Rivers Public Charter School Rubric for Problem Solving and Summit Cognitive Skills Rubric

				
Designing a Solution	<ul style="list-style-type: none"> Designs a solution to address a problem with little or no connection to criteria or constraints. 	<ul style="list-style-type: none"> Designs a solution that addresses a problem while satisfying core criteria and constraints. Evaluates the solution but only referring to evidence. Makes some attempt to improve results or products. 	<ul style="list-style-type: none"> Designs a solution that addresses a real-world problem and/or the client's needs while satisfying most restraint criteria. Evaluates the solution based on accurate analysis of research and findings. Follows through on a plan to improve accuracy of results or quality of product. 	<ul style="list-style-type: none"> Designs a solution that effectively addresses a real-world problem and/or the client's needs while satisfying all restraint criteria. Evaluates the solution based on accurate analysis of research and findings using credible data and sources. Follows through on a plan to improve the accuracy of results or quality of product based on results and/or feedback.

MAJOR Challenge: Deepen the Rigor and Complexity of Our PBL

10th Grade Team



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**



**RESILIENT
LEARNERS**



**CRITICAL
THINKERS**



**COLLABORATIVE
TEAMMATES**



**College,
Career,
AND
Community
READY**



OAKLAND UNIFIED SCHOOL DISTRICT
Community Schools, Thriving Students



OUSD PBL Framework

<u>Authenticity</u>	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.
<u>Key Knowledge, Understanding, Success Skills</u>	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 ELD, and 21st century skills in the context of pathway theme.
<u>Challenging Problem or Question</u>	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.
<u>Sustained Inquiry</u>	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.
<u>Student Voice and Choice</u>	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.
<u>Collaboration</u>	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.
<u>Reflection</u>	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.
<u>Critique and Revision</u>	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.
<u>Public Audience/Exhibition</u>	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.



Key Reference: [PBL Framework](#)

Project Overview			
Teachers:			
Name of Project:		Duration:	
Subjects/Courses:		Grade Level:	
Project Idea: <i>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)</i>			
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) <ul style="list-style-type: none"><input type="checkbox"/> Is <i>open-ended</i>; that is, it typically will not have a single, final, and correct answer.<input type="checkbox"/> Is <i>thought-provoking</i> and <i>intellectually engaging</i>, often sparking discussion and debate.<input type="checkbox"/> Calls for <i>higher-order thinking</i>, such as analysis, inference, evaluation, prediction.<input type="checkbox"/> Points toward <i>important, transferable ideas</i> within (and sometimes across) disciplines.<input type="checkbox"/> <i>Rekurs</i> over time; that is, the question can and should be revisited again and again. <i>Examples:</i> 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?		

OUSD adapted from BUCK INSTITUTE FOR EDUCATION, 2018

New Designs for School

Deep Community Partnerships Lead to Authentic Project-Based Learning at OUSD



Professional Learning

Student Voice in Teacher Professional Learning





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

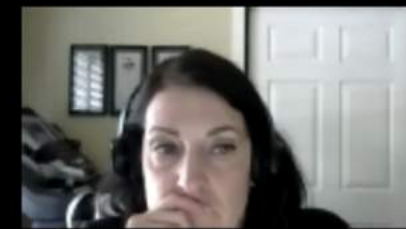


February 24, 2020

Climate Impacts & Recommendations



Climate Impact	Recommendation	Rationale
Extreme heat outdoors is a concern because students of all ages spend part of their day outdoors. 	<ul style="list-style-type: none">• Add benches that are covered by roofs of nearby buildings or have have shade from trees• Add benches with covers over them	Provide cool places for students to sit outside 
	<ul style="list-style-type: none">• Cover some sections of bleachers on High School fields• Cover playgrounds with shade structures	Reduce fatigue, sunburn and other heat impacts when students play and exercise.
	<ul style="list-style-type: none">• Plant more <i>Metrosideros excelsa</i> or other fast growing “urban” or native trees	Provide shade and improve air quality. Need to water until roots are developed.



The Young and the Woke

The Elements of Powerful Learning

MARCH 10, 2020

SEASON 2

EPISODE 1



The Young and the Woke

The Elements of Powerful Learning



00:00 | 11:53

LISTEN ON



SHARE EPISODE



On your mind?

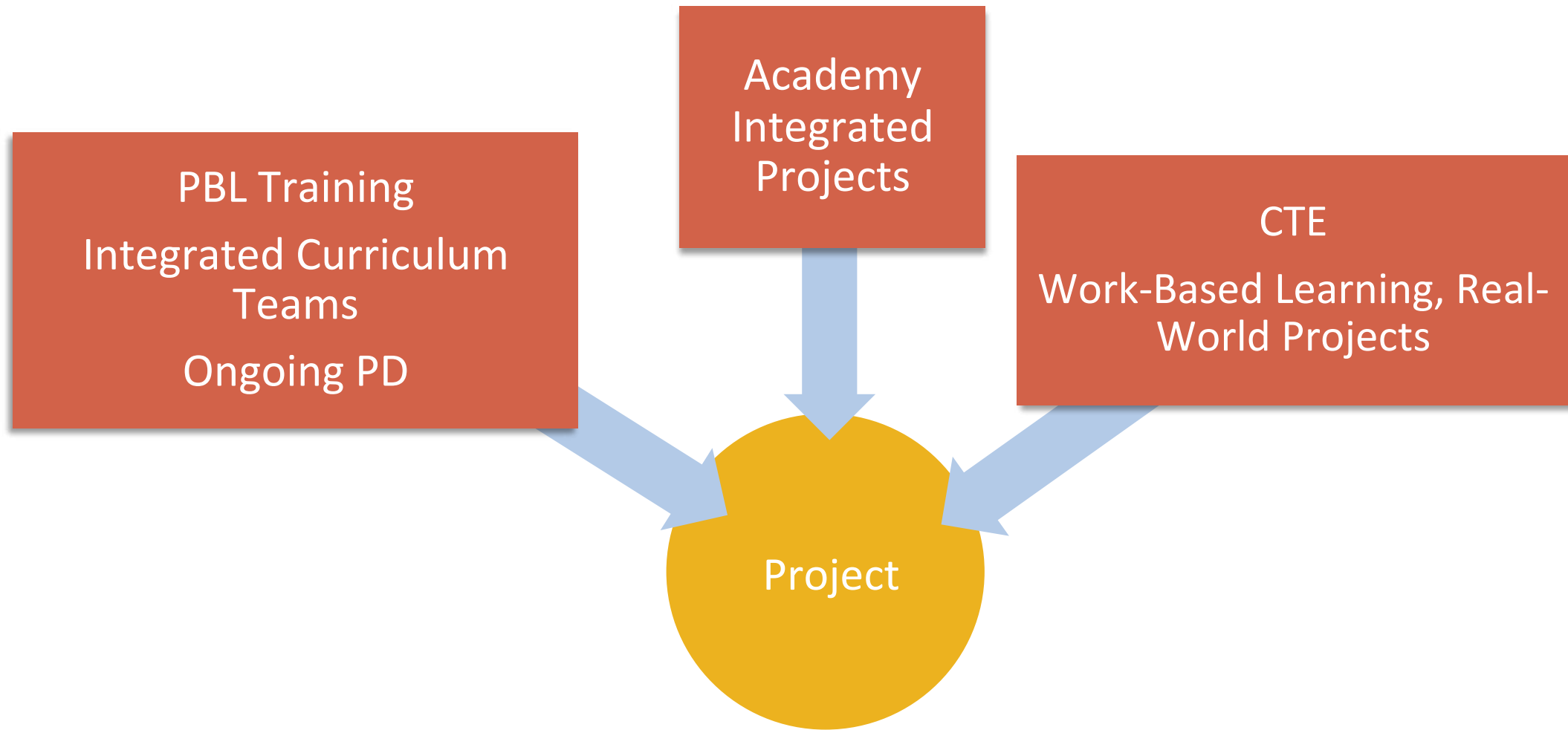


Challenge Meets Opportunity

- **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



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



CY16

System Development & Test

**STEM
Demo**

CY17

Ph. 2 Systems Development

**ERM
Demo**

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

Generate and transform original ideas through the development of new products, projects and/or concepts. Integrate and synthesize information from a variety of disciplines to create value. Persevere through *taking* risks, experiencing success and setbacks while identifying solutions and continued enhancements.

Make responsible, culturally responsive, mindful decisions. Build community, demonstrate global awareness and perspective.



Commit to a common purpose by working with others in the effort to achieve shared goals. Adapt to dynamic situations and settings while building trust and behaving responsibly. Work successfully with a diverse group of people.

Demonstrate the ability to effectively receive and deliver multiple ideas, information, and opinions. Use academic and technical language appropriate for the situation, through reading, writing, listening, speaking and the use of technology. Advocate for self and others.

- 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?

