

Project-Based Learning – A Path to Proficiency

Purpose

This document provides definitions, information, and suggestions for using essential elements of Project-Based Learning as a tool for K-12 proficiency-based instruction. Intersections of Project-Based Learning and Proficiency-Based Learning are described for students, teachers, schools, and districts to consider when planning for learning in remote or blended environments.

Introduction: Definitions and Misconceptions of Project-Based Learning

What Project-Based Learning IS:

Project-based learning is a "teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge" (PBL Works). Students begin with a driving question that addresses a complex problem or inquiry that has meaning for them, and engage in an investigation that culminates in a product or presentation to an audience. While working toward that end, students develop a sense of purpose for their work as well as ownership over what and how they are learning.

According to <u>PBL Works</u>, project-based learning "unleashes a contagious, creative energy among students and teachers," strengthening relationships and creating a life-long love of learning. Students gain academic skills and content knowledge while honing critical thinking, collaboration, creativity, communication, and other transferable skills. When done correctly, project-based learning is the perfect complement to proficiency-based learning since both allow students to engage in authentic learning opportunities that are meaningful and relevant to their lives and provide opportunities to present evidence of their learning in creative ways.

Sustained Inquiry: What is it?

Inquiry is the process by which students gain knowledge, understanding, and skills while determining approaches for applying what they learn to a real-world challenge. Sustained inquiry includes the steps students take in response to the driving question, and upon which they ask themselves "What do we know?" and "What do we need to know?" (Larmer, Mergendoller, & Boss 2015). With teacher guidance and encouragement, students determine and follow their own path to learning through research and inquiry, and with creative thinking and innovation develop an authentic response to a real-world problem.

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What Project-Based Learning IS NOT:

There are certain misconceptions associated with Project-Based Learning. The following offer clarification for some common misconceptions of the approach:

- **Inquiry is not the same as research**. Though research can serve as a tool to support inquiry, student engagement increases when they have an active role in information gathering. Whereas research involves accessing the results of someone else's inquiry process, sustained and authentic inquiry supports a student's personalized approach to understanding the content. It allows students to collect data and actively determine ways to answer their complex questions.
- **Projects alone do not equal project-based learning**. Many types of assignments and activities could be labeled as "projects" but not be rigorous enough to fit the definition of Project-Based Learning. Project-based Learning introduces an open-ended challenge or driving question to which students don't have the answer, setting them on an inquiry path. Students need to synthesize content knowledge in order to find a solution and determine how to communicate the solution to a target audience.
- Learning is not either "authentic" or "inauthentic." There is a spectrum of authenticity. John Larmer describes a learning experience as authentic if it meets one or more of the following criteria:
 - student products meet a current need or will be used by real people;
 - the project addresses an issue that is relevant to students' lives, either now or when they enter the adult world;
 - it involves a realistic simulation; or
 - it requires tools or processes used by adults in real settings, such as the workplace (<u>Larmer, 2012</u>).

Essential Elements

Seven essential elements can be outlined and integrated into Project-Based Learning to ensure rigor, student ownership, and authenticity (i.e. "<u>Gold Standard PBL</u>"):





These elements can be used to guide teachers through planning units that support engagement, understanding, and proficiency in any academic domain.

Intersections with Proficiency-Based Learning

In Project-Based Learning, students seek out answers to a driving question or challenge, placing them on a self-directed path of inquiry as they discover and apply key knowledge and skills to the development of a public product. With learning targets as a guide and teachers as facilitators, students can choose how they pace and demonstrate their learning throughout the choice- and inquiry-based process (i.e. students choose how they become proficient and demonstrate proficiency in an academic domain), rather than answering questions on a test.

A Focus on Proficiency

In Project-Based Learning, students must ideate, inquire, develop, refine, produce, present, explain, justify, and defend their response to an academic challenge, culminating in a product that can be used for the betterment of the community or an initiative. Through these processes, students engage in multiple assessments and have myriad opportunities to improve skills and knowledge to demonstrate proficiency. There is no single measure to assess the key knowledge and skills necessary to create a solution to an open-ended academic challenge. Therefore, a single overall score on a personalized and sustained process like Project-Based Learning would demonstrate multiple proficiencies across academic domains. Students and teachers must evaluate their performance on these enduring tasks using rubrics with criteria defined by proficiency scales. This could include the extent to which understanding is demonstrated through application of the knowledge or the student's ability to communicate their understanding of the knowledge and findings via a product and/or presentation.

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Why it Matters

Because of its natural connections to proficiency-based learning, and its flexible and crossdisciplinary nature, Project-Based Learning lends itself to many different learning environments, including online and blended learning. Project-based learning can be implemented both synchronously and asynchronously to match the demands of the current educational landscape. Students can take control of their learning and approach academic objectives through an authentic and enduring process in remote learning contexts. Students are able to approach learning through their own lens, increasing engagement and interest in learning among diverse student populations (Hixson, Ravitz, & Whisman, 2012). This ownership supports intrinsic motivation and engagement, which has shown to be effective in beginning to close the opportunity gap (Boaler, 2002; Penuel & Means, 2000; Robinson & Aronica, 2018).

References

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