



Teaching Strategies: Project-based Learning

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Overview

Project Based Learning, like problem-based learning, is a teaching method by which students explore the content through solving of a problem, challenge, or the completion of some project. The elements of PBL that make it successful are (adapted from http://bie.org/about/what_pbl):

- **Significant Content**
- **21st century competencies**
- **In-Depth Inquiry**
- **Driving Question**
- **Need to Know**
- **Voice and Choice**
- **Critique and Revision**
- **Public Audience**

Projects typically present students with a problem to solve; a dilemma to investigate; a decision to make; or a challenge to overcome. Projects should promote critical thinking and give students an opportunity to apply the content. Projects should not be “busy work” such as posters, dioramas, building models, volcanoes, etc. Meaningful projects should have driving questions, much like good essays should have thesis statements. An example biology project might be: How can we reduce the number of days Foster's Beach is closed because of poor water quality? (Larmer & Mergendoller, 2010).

Quick Start Guide - 101

Employing this strategy can be rewarding but takes careful planning to give your students the tools they need to complete the project - we have created a planning document that walks you through the steps to creating a comprehensive lesson based on PBL, that can be found here: [Project-Based Learning Instruction Planning Template](#)

IT Solutions

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Variations

This section outlines how you might begin to think about adopting this teaching strategy and the tools you might consider employing.

- Problem-based learning, also called PBL, presents a fully formed "real-world" problem to students at the outset of a course.

Project Based Learning vs. Problem Based Learning	
<i>Similarities</i>	
<p>Both PBLs:</p> <ul style="list-style-type: none"> • Focus on an open-ended question or task • Provide authentic applications of content and skills • Build 21st century 4 C's competencies • Emphasize student independence and inquiry • Are longer and more multifaceted than traditional lessons or assignments 	
<i>Differences</i>	
Project Based Learning	Problem Based Learning
Often multi-disciplinary	More often single-subject
May be lengthy (weeks or months)	Tend to be shorter
Follows general, variously-named steps	Follows specific, traditionally prescribed steps
Includes the creation of a product or performance	The "product" may simply be a proposed solution, expressed in writing or in an oral presentation
Often involves real-world, fully authentic tasks and settings	More often uses case studies or fictitious scenarios as "ill-structured problems"

From: Larmer, John. [Project-Based Learning vs. Problem-Based Learning vs. X-BL](#)

- [Online collaborative tools](#) are useful for project-based learning. [One Drive](#) allows students to share documents in the cloud. Mind mapping tools can help students brainstorm and create logic chains to solve the problem.

On the Web

- [Seven Essentials for Project-based learning](#)
- [Project-based Learning \(BIE\)](#)
- [Project-based Learning \(Edutopia\)](#)

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