



# Designing and Implementing Effective Project-Based Learning in K-12 Classrooms

## Course Syllabus

### Course Description/Purpose

The purpose of this professional development course is to cover the key design elements and teaching practices of Project Based Learning (PBL). Teachers will learn how to align projects with curriculum standards, challenge students to solve real-world problems, and foster inquiry, critical thinking, and problem-solving skills. The course will also cover assessing and providing feedback, coaching and classroom management strategies, ways to scaffold learning for student success, and facilitating effective reflection practices. By the end of the course, teachers will have a deep understanding of PBL and will be equipped with the knowledge and skills to design and implement effective PBL projects in their own classrooms.

This course enhances classroom teaching effectiveness and supports improved student outcomes by introducing new knowledge in Project-Based Learning design and implementation, focusing on standards alignment, real-world problem-solving, assessment, and strategies to lead student-centered, high-quality PBL experiences.

### Course Objectives

At the end of this course you should be able to:

1. Analyze the principles and components of project-based learning (PBL) in relation to traditional teaching methods by identifying at least three key differences.
2. Design an effective PBL unit that addresses a real-world problem and aligns with subject-specific standards.
3. Develop one formative and one summative assessment tool that measures student learning outcomes within a PBL unit.
4. Prepare a comprehensive project overview plan that outlines the required skills, lessons, timeline, and resources for successful project completion.
5. Describe and apply at least one scaffolding strategy within a mini-lesson to support student learning in a PBL context.
6. Identify and document two coaching strategies in a classroom plan to promote a collaborative and positive culture during PBL.



7. Apply at least three classroom management strategies in a plan tailored to facilitate student success in a PBL environment.
8. Design and implement a reflection activity for students to use at the beginning, middle, and end of a PBL unit to support continuous learning.

### **Modules**

- Module 1: Introduction to Project Based Learning, Quiz 1
- Module 2: Designing Effective Projects, Quiz 2
- Module 3: Project Based Assessment, Quiz 3
- Module 4: Planning and Preparing, Quiz 4
- Module 5: Scaffold Student Learning, Quiz 5
- Module 6: Engage and Coach, Quiz 6
- Module 7: Classroom and Project Management, Quiz 7
- Module 8: Reflection in PBL, Quiz 8

### **Grading:**

Each quiz must be passed at an 80% or higher (three attempts allowed).

### **Format**

This is a self-paced, asynchronous (no required live meetings) course. Throughout the PD course, you will find it helpful to take notes along the way to assist with the quizzes. Within each module, you will find reflection assessments that are not graded but will help in your journey through the course. There is an interactive forum in the course to help you connect with peers and instructors, share ideas, and collaborate on best practices throughout your learning journey.