## **Problem Based Learning**

# Developing Competent and Confident Problem Solvers

# **An Online Graduate Course**

**Syllabus** 

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## **Course Description**

Problem-Based Learning (PBL) is an increasingly popular, dynamic instructional strategy implemented in classrooms across the country. The skills developed in PBL experiences are the skills that students will need for success in the global economy. PBL engages students in problem solving to increase student achievement, interest, and engagement.

This course will explore the elements of Problem Based Learning. Emphasis will be placed on student-centered pedagogy that involves the re-imagination and re-design of the classroom. With PBL, students are involved in critical thinking, collaboration, and communication.

Participants will become adept at creating PBL experiences that engage and challenge their students.

# **Objectives**

- Define what PBL is
- Distinguish between Problem Based Learning and Project Based Learning
- Dispel the myths associated with PBL
- Explore the benefits of PBL
- Acquire the tools needed to successfully develop effective PBL experiences
- Identify strategies for implementing PBL with students with different abilities and interests
- Apply the latest research regarding PBL
- Expand the role of assessment with PBLs
- Plan for the challenges of PBL
- Explore how PBL can be adapted to virtual learning
- Examine how the role of the teacher changes in a PBL world
- Create an organized, ongoing resource list of professional and educational websites

### **Curriculum Design**

This is a sixty-hour, three credit graduate level course completed over a thirteen-week period. Modules One through Nine will be completed one per week. Module Ten will be completed over a two-week period so students will have time to revise and complete the final integration project.

## **Hardware & Computer Skills Requirements**

Computer and Internet access required. Students must have regular access to a computer and be able to use computer skills to successfully complete this course. Many problems instructors and students run into stem from mis-configured browsers, incorrect software versions, pop-up blockers, and other issues. Most of these issues can be prevented by performing the browser tune up before the course or once a problem arises. Often students find it easier to use *Mozilla Firefox*, *Google Chrome*, or *Safari* rather than Internet Explorer; for some applications Internet *Explorer* may work well.

#### **Course Materials**

Project Based Teaching: How to Create Rigorous and Engaging Learning Experiences by Suzie Boss with John Larmer. Publisher: ASCD, 2018.

#### **Module Outline**

#### **Introduction:**

Content:

- 1. Getting to Know You
- 2. Course materials
- 3. Class procedures

#### **Module One:**

Content:

- 1. Define Problem Based Learning
- 2. Discover the difference between Project and Problem Based Learning
- 3. Explore the advantages of PBL
- 4. Dispelling the myths of PBL

### **Module Two:**

Content:

- 1. Define the PBL Design Elements
- 2. Exploring the Elements as You Design a PBL

#### **Module Three:**

Content:

- 1. Define the 7 PBL Teaching Practices
- 2. Creating a Student-Centered Classroom
- 3.

### **Module Four:**

Content:

- 1. Exploring the 6 C's of PBL
- 2. Designing a PBL

3. Creating a PBL for your Classroom

## **Module Five:**

Content:

- 1. Exploring Paradigm Shifts
- 2. Building a PBL Mindset

## **Module Six:**

Content:

- 1. Types of PBL Projects
- 2. Managing the Activities

## **Module Seven:**

Content:

- 1. Creating Project Teams
- 2. Assessment of PBL

# **Module Eight:**

Content:

- 1. Addressing Equity
- 2. Using Technology in PBL

## **Module Nine:**

Content:

- 1. Presenting and Publishing
- 2. Collaborating with colleagues

## **Module Ten:**

Content:

- 1. Pulling it All Together
- 2. One short term and one long term PBL

# **Student Requirements**

- 1. Participation: Actively participate in all activities.
- 2. Reading assignments: Complete all readings and reflection assignments.

# **Grading Criteria**

Assignment	Points Earned (		<b>Grading Scale</b>	
Class Participation	20	100-93	$ar{\mathbf{A}}$	
Class assignments	80	92-85	В	
Total Points	100	84-77	C	

## **Student Academic Integrity**

Participants guarantee that all academic class work is original. Any academic dishonesty or plagiarism (to take ideas, writings, etc. from another and offer them as one's own), is a violation of student academic behavior standards as outlined by our partnering colleges and universities and is subject to academic disciplinary action.