

Comparing PBL and Traditional Methods

How can you best achieve valued outcomes?

Curriculum as Prescription	Curriculum as Experience
<ul style="list-style-type: none">• From the perspective of teacher/expert• Linear and rational• Part to whole organization• Teaching as transmitting• Learning as receiving• Structured environment	<ul style="list-style-type: none">• From the perspective of student/learner• Coherent and relevant• Whole to part organization• Teaching as facilitating• Learning as constructing• Flexible environment

Role of the Teacher

Instructional Approach	Role of the Teacher	
Lecture	As expert:	<ul style="list-style-type: none"> • Directs thinking • Holds knowledge • Evaluates students
Direct Instruction	As conductor:	<ul style="list-style-type: none"> • Orchestrates learning • Guides rehearsal • Evaluates students
Case Methods	As consultant:	<ul style="list-style-type: none"> • Lectures pre/post • Sets the environment • Advises • Evaluates students
Mantle of the Expert (Roles)	As travel agent:	<ul style="list-style-type: none"> • Enables learning from within group • Maps ways in which students will discover what they need to know to complete task • Guides their journey • Debriefs situation
Problem-centered Learning	As resource:	<ul style="list-style-type: none"> • Explicitly teaches content and problem-solving • Poses problems with which students relate • Translates into students' world • Evaluates students
Simulation and Gaming	As stager:	<ul style="list-style-type: none"> • Manages situation • Sets simulation/game in motion • Watches from the wings • Debriefs situation
Discovery-Based Inquiry	As mystery writer:	<ul style="list-style-type: none"> • Combines parts that lead to "discovery" • Sets the environment • Provides clues, foreshadows events • Evaluates students
Problem-Based Learning	As coach:	<ul style="list-style-type: none"> • Presents problematic situation • Models, coaches, and fades • Engages in the process as co-investigator • Assesses learning

Role of the Student

Instructional Approach	Role of the Student	
Lecture	As receiver:	<ul style="list-style-type: none"> • Inert • Inactive • Empty
Direct Instruction	As follower:	<ul style="list-style-type: none"> • Responsive • Semi-active • Waiting to be lead
Case Methods	As client:	<ul style="list-style-type: none"> • Responsive • Semi-active • Applying own experience
Mantle of the Expert (Roles)	As traveler:	<ul style="list-style-type: none"> • Actively experiencing the journey, journaling the trip • Where role and task are inseparable
Problem-centered Learning	As problem-solver:	<ul style="list-style-type: none"> • Evaluating resources • Crafting divergent solutions • Active
Simulation and Gaming	As player:	<ul style="list-style-type: none"> • Experiencing simulation/game • Reacting to emergent conditions/variables • Active
Discovery-Based Inquiry	As detective:	<ul style="list-style-type: none"> • Picking up clues • Semi-active • Seeking out evidence
Problem-Based Learning	As participant:	<ul style="list-style-type: none"> • Actively grappling with the complexity of the situation • Investigating and resolving problem from the inside

Cognitive Focus

Instructional Approach	Role of the Student
Lecture	Students replicate received knowledge and apply in testing situation.
Direct Instruction	Students practice and replicate received knowledge and apply in testing situation.
Case Methods	Students apply received knowledge and own experience in case resolution.
Mantle of the Expert (Roles)	Students reconstruct classroom communication creating a dialectic where they learn at the conceptual, personal, and social levels.
Problem-centered Learning	Students apply "discovered" truths to the construction of other constructs and principles.
Simulation and Gaming	Students synthesize received knowledge and individuality in the resolution of problems within curricular context.
Discovery-Based Inquiry	Students learn about themselves, their roles in life situations, and about the bit of reality modeled.
Problem-Based Learning	Students synthesize and construct knowledge to bring resolution to problems in a way that meets the conditions that they themselves set forth.

Metacognitive Focus

Instructional Approach	Role of the Student
Lecture	Passive learner. Study skills are the responsibility of the student.
Direct Instruction	Guided practice provides tacit focus upon strategies.
Case Methods	Strategies learned are applied to cases, not necessarily independently.
Mantle of the Expert (Roles)	The eminent pressure of the lived experience activates prior learning. Teacher simultaneously models and coaches.
Problem-centered Learning	Inquiry process learned is applied to investigations, not necessarily independently.
Simulation and Gaming	Problem-solving process learned is applied to problems, not necessarily independently.
Discovery-Based Inquiry	Learning exposed during the debriefing process. Experience interpreted and evaluated in reflection.
Problem-Based Learning	Teacher models and coaches as needed. Students develop strategies to enable and direct their own learning.

Role of the Problem

Instructional Approach	Role of the Problem
Lecture	As a student... learning about things outside personal experience or "over there".
Direct Instruction	
Case Methods	
Mantle of the Expert (Roles)	As a doer... walking in the time of the event, learning about events "here".
Problem-centered Learning	As a student... learning about things outside personal experience or "over there".
Discovery-Based Inquiry	
Simulation and Gaming	As a player or pawn... reacting to events which are part of personal experience or "here" to relate to things "over there".
Problem-Based Learning	As a stakeholder... immersed in the situation, learning about events "here".

Problem

Instructional Approach	Role of the Problem
Lecture	<ul style="list-style-type: none"> • Well-structured • Presented as a challenge to retention
Direct Instruction	
Case Methods	<ul style="list-style-type: none"> • Well-structured • Presented as a challenge to application and analysis
Mantle of the Expert (Roles)	<ul style="list-style-type: none"> • Tightly focused, but somewhat ill-structured • Presented as a situation that demands interaction with the social system
Problem-centered Learning	<ul style="list-style-type: none"> • Moderately-structured • Presented as a strategy to develop effective learning behaviors
Simulation and Gaming	<ul style="list-style-type: none"> • Moderately-structured • Presented as a strategy to understand self and/or events
Discovery-Based Inquiry	<ul style="list-style-type: none"> • Well-structured • Presented as a strategy for knowledge construction
Problem-Based Learning	<ul style="list-style-type: none"> • Ill-structured • Presented as a situation within which a compelling problem is yet to be defined

Information

Instructional Approach	Information
Lecture	Organized and presented by instructor.
Direct Instruction	
Case Methods	Most is organized and presented by instructor.
Mantle of the Expert (Roles)	
Problem-centered Learning	
Simulation and Gaming	
Discovery-Based Inquiry	
Problem-Based Learning	Students synthesize and construct knowledge to bring resolution to problems in a way that meets the conditions that they themselves set forth.