

What is PBL?

Institute for Transforming
Undergraduate Education



University of Delaware

Problem-Based Learning: From Ideas to Solutions through Communication

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Characteristics Needed in College Graduates

Excellent communication skills

Ability to define problems, gather and evaluate information, develop solutions

Address problems in a complex real-world setting

Team skills – ability to work with others

Carnegie Foundation Recommendations

Make research-based learning the standard.

Build inquiry-based learning throughout the
four years.

Link communication skills and course work.

Use information technology effectively.

Cultivate a sense of community.

What is PBL?

“The principal idea behind PBL is that the starting point for learning should be a problem, a query, or a puzzle that the learner wishes to solve.”

What Is PBL?

“...careful inspection of methods which are permanently successful in formal education...will reveal that they depend for their efficiency upon the fact that they go back to the type of situation which causes reflection out of school in ordinary life. *They give pupils something to do, not something to learn; and if the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results.*”

What is PBL?

“...a process of acquiring understanding, knowledge, skills and attitudes in the context of an unfamiliar situation, and applying such learning to that situation.”

What are the Common Features?

Learning is initiated by a problem.

Problems are based on complex, real-world situations.

All information needed to solve problem is not given initially.

Students identify, find, and use appropriate resources.

Students work in permanent groups.

PBL Process

Presentation of Problem



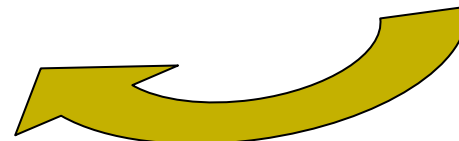
Organize ideas and prior knowledge
(What do we know?)



Pose questions, state learning issues
(What do we need to know?)



Assign responsibility for questions; discuss resources



Research questions;
summarize;
analyze findings



Reconvene, report on research



Integrate new Information;
Refine questions



Resolution of Problem;
(How did we do?)

