Characteristics Needed in College Graduates

High level of communication skills
Ability to define problems, gather and evaluate information, develop solutions
Team skills -- ability to work with others
Ability to use all of the above to address problems in a complex real-world setting

Quality Assurance in Undergraduate Education (1994)
Wingspread Conference, ECS, Boulder, CO.

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.”

John Dewey (1916)

What are the Common Features of PBL?

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.
Learning is active, integrated, cumulative, and connected.

PBL: The Process

Resolution of Problem; (How did we do?)
Integrate new Information;
Refine questions
Reconvene, report on research;
Research questions; summarize; analyze findings

Next stage of the problem

Presentation of Problem
Organize ideas and prior knowledge (What do we know?)
Pose questions (What do we need to know?)
Assign responsibility for questions; discuss resources