What Is PBL?  Why PBL?

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www.udel.edu/pbl/ysu
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
In Knowledge Work …

The task is not given; it has to be determined.

There is usually no right answer; there are choices instead.

Peter Drucker

*Post-Capitalist Society*
What Is PBL?

“What 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.”

Deflating Grady – Part 1

Read over the e-mail exchange and discuss the ideas it raises about grade inflation

As a group, compose a definition of grade inflation and be prepared to present it.

*Be prepared to “report out” in 10 minutes*
Deflating Grady – Part II

Read over the information presented, and be prepared to report out on your responses to questions 1 and 2.

Be prepared to “report out” in 10 minutes
Characteristics of Good Learning Issues

Presented in the form of a question or series of questions.

Focused so that it seeks specific information.

Constructed so that it asks an answerable question.

Pursues information that is relevant to the problem.

Goes beyond superficial knowledge to probe conceptual issues.

Often set in a context that provides direction. Why is the question important?
Deflating Grady – Final Parts

Video clip of faculty senate president describing the situation…
Remainder of problem: Jigsaw Group Scheme

4 home groups, with 4 members each

4 new expert groups, with one representative from each home group

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.
A Typical Day in a PBL Course
PBL: The Process

Resolution of Problem;
(How did we do?)

Integrate new Information;
Refine questions

Reconvene, report on research;

Research questions; summarize; analyze findings

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

Next stage of the problem
“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.”

*Boud (1985)*
PBL Contrasted with Subject-Based Learning

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Factors in Choosing a Model

Class size
Intellectual maturity of students
Student motivation
Course learning objectives
Instructor’s preferences
Availability of peer facilitators
Common Classroom Models

• Medical school
• Floating Facilitator
• Peer Facilitator
• “Hybrid”
Medical School Model

- Dedicated faculty tutor
- Groups of 8-10
- Very student-centered environment
- Group discussion is primary class activity

A good choice for
- Highly motivated, experienced learners
- Small, upper-level seminar classes
**Floating Facilitator Model**

- More structured format: greater degree of instructor input into learning issues and resources
- Group size: 4-6

**A good choice for**
- Less experienced learners
- Classes of all sizes

- Instructor rotates through groups: Asks questions, directs discussions, checks understanding
- Other class activities:
  - Groups report out
  - Whole class discussions
  - (Mini-)lectures
Peer Facilitator Model

Advanced undergraduates serve as facilitators

– Help monitor group progress and dynamics
– Serve as role models for novice learners
– Capstone experience for student facilitators

A good choice for
• Classes of all sizes
Dealing with Large Classes

Floating facilitator or peer facilitator models are the most appropriate.

Requires a more teacher-centered, structured format: instructor directs group activities

Group size: 4

Reduce grading burden through group (vs. individual) papers, projects
“Hybrid” PBL

• Non-exclusive use of problem-driven learning in a class
• May include separate lecture segments or other active-learning components
• Floating or peer facilitator models common

*Often used as entry point into PBL in course transformation process*
Question for Groups

What challenges to PBL implementation exist for the undergraduate context?

Be prepared to report out in 5-10 min.
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