

Problem-Based Learning

Creating opportunities for inquiry,
investigation, research, and
resolution.





What is Problem-Based Learning?



- An instructional method which focuses on the investigation and resolution of messy, “real world” problems as a context for students to learn critical thinking and problem solving skills

Benefits(польза) of PBL

- Makes learning relevant to the real world (and answers the dreaded question...)
- Moves learning from a passive activity to an active activity -- learning becomes the act of discovery
- Increases motivation -- students are more engaged, interested, and energetic learners as they make a personal investment in the outcome of their inquiry

Comparison of teaching methods

Lecture

Role of Teacher:

- As expert:
 - Directs Thinking
 - Holds Knowledge
 - Evaluates Students

Role of Student:

- As receiver:
 - Inert
(бездеятельный)
 - Inactive
(неактивный)
 - Empty (без нагрузки)

Comparison of teaching methods

Direct Instruction

Role of Teacher:

- As conductor:
 - Orchestrates learning
 - Guides rehearsal
(повторение)
 - Evaluates (оценивать)
Students

Role of Student:

- As follower:
 - Responsive
(ответный)
 - Semi-active (полу
активный)
 - Waiting to be lead

Comparison of teaching methods

Problem-Based Learning

Role of Teacher:

- As coach:
 - Presents problematic situation
 - Models, coaches, and fades
 - Engages in process as co-investigator (co-исследователь)
 - Assesses (оценивать)

Role of Student:

- As participant:
 - Investigates and resolves problem from the inside

Teachers = Active Coaches



- Diagnosing needs
- Mentoring learning
- Encouraging process
- Questioning thinking

Step 1. Create a PROBLEM

- Find a real life situation with multiple solutions that interests the students
- Organize the students into teams



Step 2. Problem analysis

- Students list known facts
- List unknowns
- Research unknowns



Step3. Test theories

- Students must model the situation to test their theories
- Students generate possible solutions

Step 4. PRESENTING

- Students select the solution that best fits
- Students present their solutions and methods



Step 5. Performance Assessment (оценка)



- Goal is for teacher to assess **LEARNING**
- Teacher typically assesses culminating performance via a rubric -- on content, presentation skills, teamwork, and fit of solution.



Assessment Options

Presentation

Charts

Report

Panel Discussion

Patient Consultation

Debate

Map

Video

Proposal

Letter to a committee

Web page

Step 7. Debriefing(опрос, ИТОГ)

- Consider the following questions as a way of providing closure:
 - Were the strategies you used to solve the problem effective? What would you do differently?
 - What can you do now that you didn't think you could do before?

Thank you for attention!