

PROBLEM BASED LEARNING - BEST METHOD OF LEARNING



Mr. Pravin Ramesh Gholap,
Principal,
Vishwasattya College of,
Nursing Ozar (Mig), Nashik.

Abstract :

PBL is more than an extremely effective environment to learn subject knowledge. It can be used to help students develop skill in lifetime learning, change management, teamwork, conflict resolution and problem solving. However, for this to be effective there is much that a teacher can do to help the students acquire these abilities.

These skills need to be identified as valued outcomes of the program. Learning objectives and criteria should be created. Journal writing provides an excellent way to help students gather evidence of accomplishment. Options for assessment will be discussed.

Key Words : Problem based learning

Introduction :

- What is problem-based learning (PBL) from the familiar subject based learning (SBL) ?
- Illustrations with the different processes
 - SBL starts with “told what we need to know” then we learn it and then a problem was given for us to illustrate how to use it.
 - PBL starts with “a problem posed” then we need to identify what we need to know, learn it and then apply it

Why PBL ? :

Learning begins with a problem :

In problem-based learning (PBL), students work together in small groups to solve real-world problems. PBL is an active and iterative process that engages students to identify what

they know, and more importantly, what they don't know. Their motivation to solve a problem becomes their motivation to find and apply knowledge. PBL can be combined with lecture to form a hybrid model of teaching, and it can be implemented in virtually all courses and subjects.

Main Principles Underpinning PBL :

- Students construct their understanding instead of receiving instruction.
- Students do not start with an empty slate. They possess prior knowledge, assumptions and experiences and these are critical in helping students make sense of any new information.
- Learning happens in a social context, with meaning negotiated in a collaborative team setting.
- Learning and problem solving strategies are consciously applied to deal with unfamiliar information, handling team dynamics and working out feasible and well-thought through solutions.
- Learning takes place through self-directed discovery & questioning and is supported by a facilitator who has a good understanding of the learning processes.
- The use of problems acts as a stimulus for learning.
- Critical reflection happens throughout the learning process.

Problem Base Learning Process :

- Explore the problem, identify issues and create hypotheses -
- Try to solve the problem with current knowledge or experience that may be pertinent to the case/situation
- Identify what one does not know
- Prioritize the learning needs, set learning goals and objectives, and allocate resources so that the student knows what is expected of him/her and the timelines. For a group, members can identify which tasks each will perform.
- Self-study and preparation.

- Share the new knowledge effectively so that all the group learn the information and its applicability.
- Apply the knowledge to understand the issues at hand and come up with various possibilities to solve the problem
- Provide feedback to self and others through reflecting upon the new knowledge, the problem solution(s) and the effectiveness in the use of the process

Basic Tenets of Problem Based Learning :

- Instructional method using “real world” problems
- Students:
 - Acquire knowledge – emphasis is on “making meaning”
 - Increases relevance of new material
 - Practice critical thinking and problem solving skills
 - Identify and utilize learning resources

PBL Is A Learner-Centered Educational Method :

In PBL learners are progressively given more and more responsibility for their own education and become increasingly independent of the teacher for their education. PBL produces independent learners who can continue to learn on their own in life and in their chosen careers. The responsibility of the teacher in PBL is to provide the educational materials and guidance that facilitate learning.

Student Role :

- Present student group with problem
- Group roles emerge
- Group discussion
 - Identify previous knowledge
 - Identify knowledge gaps
 - Students rank learning issues
 - Summarize new knowledge

- Ongoing process for ALL

The Role of The PBL Teacher :

The principle role of the teacher in PBL is that of a facilitator or educational coach (often referred to in jargon of PBL as a "tutor") guiding the learners in the PBL process. As learners become more proficient in the PBL learning process the tutor becomes less active. This is a new skill for many teachers and specific training is required.

- Guide, probe, question, direct
- Support student inquiry
- Provide direction to resources
- Can stop group discussions to “focus” on key learning outcome content
- Monitor group functioning.

The Learning Group :

- Learning is ideally in small groups of 5 to 7 learners. As the group members work together to problem solve and learn they acquire collaborative or team learning skills. In some settings, as in secondary education, learner groups may initially be much larger (15-35).
- Students are presented with clinical situations, usually in the form of a paper package. In small groups (between 10-20 students) with a facilitator, they embark on the process by identifying the issues surrounding the situation and then identifying their learning needs. Following self-directed study the students re-group to feedback and evaluate their learning in order to move to the next stage - usually an action or care plan.

The Objectives of Problem Base Learning :

- Engage the problems they face in life and career with initiative and enthusiasm.
- Problem-solve effectively using an integrated, flexible and usable knowledge base.
- Employ effective self-directed learning skills to continue learning as a lifetime habit.
- Continuously monitor and assess the adequacy of their knowledge, problem-solving and self-directed learning skills.

- Collaborate effectively as a member of a group.

Advantages of Problem Base Learning

1. PBL usually synthesizes a broad range of subjects and topics
2. Old and new knowledge embedded in the context of the problem helps us to integrate the knowledge and see their relationships.
3. The problem is employed to build up ever- enriching layers of new knowledge across disciplines

Disadvantages of problem base learning :

1. Transition is difficult for students and faculty
2. Non-traditional delivery of information
3. Increased time to teach content
4. Increased prep time
5. Finding problems – writing problems
6. Faculty lack of skills as facilitators.

Faculty Feedback :

- Some students have a hard time transitioning to a new style of learning – e.g., “I learn better when information is fed to me from the professor.”
- More work and less structured
- Have to be on your toes
- Balance between giving enough direction, but not too much.
- Students seem more receptive to this pedagogy when additionally preparing for graduate school.

Reference :

1. Brunner and Siddhartha, " Medical surgical nursing”
2. Carole Elliott, “Clinical thinking in human resource development”.

3. John Barell, “Problem base learning”.
4. Morris Charles, “Psychology for nurses”.
5. Mohan De Silva, “clinical surgery made easy”.
6. Schunk dale H, “Learning theories: an education”.
7. Teena Clouston, “Problem base learning in health and social care”.
8. www.google.com
9. www.wikipedia.org
10. www.educationatlas.com
11. www.studygs.net
12. www.ask.com