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Problem-Based Learning

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With the rapid growing of medical sciences and evolving technologies, the strategy and approach to teaching must change to fulfill the new demands. Therefore, new educational and evaluation techniques should be introduced by educational researchers (1).

Problem-based learning (PBL) is a new approach, which shifts traditional, lecture-based classes to small groups, student-centered learning. It was first developed at the McMaster University Medical School in Canada in the 1960s and has since gained wide popularity worldwide. Currently, PBL is used widely in medical schools in United States, Canada and United Kingdom (2).

PBL is a student-centered approach. In this method, students are engaged with real problems.

Through this problem-based approach, students are presented with a real problem, which is explained to them by the instructor, and then they are asked to discuss about possible solutions in small groups and come up with hypothesis and theories which help them to solve the problem. Through this process, the learners are encouraged to come up with new ideas and identify learning issues, which need to be researched and answered. The role of the constructor is to develop a platform for the learners to build their knowledge and understanding of the problem on it (3).

By placing students in actual problem-solving situations, an active role is outlined for learners which switch the emphasis from teaching to learning. Enhancing learning and motivation is a unique aspect of PBL.

In contrast to the traditional classroom-lecture based teaching strategies the teacher does not have a role of spreading and distributing knowledge, but instead only guides the students actively through a path in which the knowledge is gained and learned by the students themselves. Therefore, the constructors and the students are co-learners and co-teachers at the same time (4).

The active role which is defined for students helps them to not only gain knowledge, but also learn to think correctly and in the useful direction. It is clear that students' assessment in the traditional teaching and PBL is not the same. In PBL, learners are assessed in different ways, such as how they think and by which plan they achieve their goals. In fact assessment is part of students' learning (5).

Facing the fast growing of PBL, the need for modern technologies can be a limitation and should be considered. Unfortunately, access to such facilities is not possible in many countries around the world.

In Iran, PBL has gained popularity recently, but there is still a long way to go. Recently in Tehran University of Medical Sciences PBL has been added to the curriculum of medical students. Although PBL has gained popularity worldwide, but studies are needed to assess the acceptance and efficacy of this method of teaching in the Iranian culture.

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