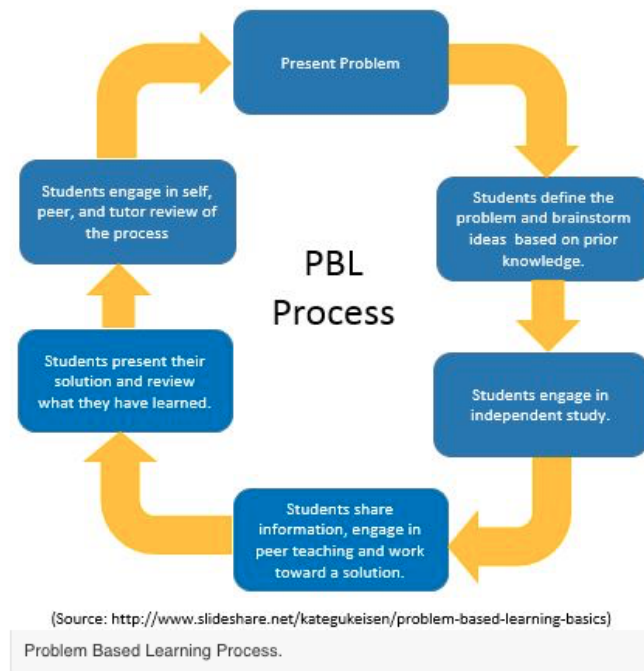


## More About Problem-Based Learning SRC Resources 6b

### Problem-Based Learning – PBL

Problem-Based Learning is quite different from “problem solving”, and the goal of the learning is not to solve the problem which has been presented. Rather, the problem is used to help students identify their own learning needs as they attempt to understand the problem, to pull together, synthesize and apply information to the problem, and to begin to work effectively to learn from other group members as well as tutors.



The PBL process involves working in small groups of learners. Each student takes on a role within the group that may be formal or informal and the roles often alternate. The learning process is focused on the student's reflection and reasoning to construct their own learning. The **seven-stage process** (see above) involves clarifying terms, defining problem(s), brainstorming, structuring and creating hypotheses, identifying learning objectives, independent study and synthesizing the results. In short, it is identifying what they already know, what they need to know, and how and where to access new information that may help them towards the resolution of the problem.

The role of the tutor is to facilitate the students' learning by supporting, guiding, and monitoring their learning process. The tutor aims to build students' confidence when addressing problems, while also expanding their understanding. This process is based on constructivism. PBL represents a paradigm shift from traditional didactic teaching and learning philosophy, which is more often lecture- or seminar-based. The constructs for teaching PBL are very different from traditional education methods and often require more preparation time and more resources to support small group learning.

Problem-based learning is a process that uses identified issues within a scenario to increase knowledge and understanding. The principles and advantages of this PBL process are listed below:

1. Learner-driven, self-identified goals and outcomes
2. Students do independent, self-directed study before returning to larger group
3. Learning is done in small groups with a tutor to facilitate discussion
4. ‘Trigger’ materials such as paper-based clinical scenarios, lab data, photographs, articles or videos or patients (real or simulated) can be used

5. The Maastricht 7-jump process helps to guide the PBL tutorial process
6. It is based on principles of adult learning theory
7. All members of the group have a role to play
8. Allows for knowledge acquisition through combined work and intellect
9. Enhances teamwork and communication, problem-solving and encourages independent responsibility for shared learning - all essential skills for future practice
10. Anyone can do it as long it is done in line with the given causes and scenarios.
11. PBL includes problems that can be solved in many different ways depending on the initial identification of the problem and these may have more than one solution.
12. It can be used to enhance content knowledge while simultaneously fostering the development of communication, problem-solving, critical thinking, collaboration, and self-directed learning skills.
13. PBL may position students to function optimally using real-world experiences. By harnessing collective group intellect, differing perspectives may offer different perceptions and solutions to a problem.
14. Problem-based learning gives emphasis to lifelong learning by developing in students the potential to determine their own goals, locate appropriate resources for learning and assume responsibility for what they need to know.
15. Students themselves resolve the problems that are given to them, they take more interest and responsibility for their learning. They themselves will look for resources like research articles, journals, web materials, text books etc. for their purpose. Thus, it equips them with more proficiency in seeking resources in comparison to the students of traditional learning methods.
16. By giving more significance to the meaning, applicability and relevance to the learning materials it leads to better understanding of the subjects learnt. When students are given more challenging and significant problems, these make them more proficient. The real-life contexts and problems makes their learning more profound, lasting and also enhance the transferability of skills and knowledge from the classroom to work. Since there is more scope for application of knowledge and skills, the transferability is increased. It will be also very helpful to them not only to visualise what it will be like applying that knowledge and expertise on their field of work or profession.
17. They are more self-motivated. In fact, they find the learning process is more fascinating, stimulating and one of the better learning methods because it is more flexible and interesting to students. They enjoy this environment of learning for it is less threatening and they can learn independently. All these aspects make students more self-motivated and they tend to pursue learning, even after they leave the training institute.
18. PBL can serve as a platform for a discursive practices approach to culture that emphasizes the emergent, participant-constructed qualities of social phenomena while also acknowledging large-scale social forces.

It is therefore suggested that PBL techniques be applied to problems like ethical dilemmas and research questions: e.g. How do trainees acquire, develop and demonstrate the necessary professional competences?