

Editorial

Facilitating problem-based learning sessions

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Problem-based learning (PBL) uses 'real life' cases to support integrated learning of the basic and the clinical sciences. PBL has now been used for over fifty years globally. This method of learning still causes division among educators and an important question on its effectiveness may not yet been satisfactorily answered despite several studies being undertaken. Many important factors like the nature of the group, the group dynamics, the facilitator, the physical space where the sessions are conducted, the cases/problems used, the curriculum and student preparation play an important role in the success of PBL. PBL challenges focusing on interpretation, empowerment and motivation have been mentioned [1]. Inter-

group and intra-group communication can affect interpretation. The facilitator's role of guiding and triggering curiosity, instead of adopting the traditional role of content provider may be wrongly perceived by some students as unhelpful and uncommunicative. Students may also question the credibility of some peer group members, with implications on group dynamics.

Important considerations while facilitating small group PBL sessions are explained and these can reduce the challenges and help to create more interactive and effective sessions.

Considerations while facilitating PBL sessions

1. Develop and strengthen facilitation skills

Students in South Africa rated facilitators who were friendly and cared about the group highly [2]. Students should be aware that you want them to succeed, and care about them. They wanted the facilitators to encourage group members. Faculty members in a hybrid curriculum may find it difficult to let go of the traditional authority associated with a teacher and assume a different role. Training programs for new PBL facilitators have been found to be useful. Facilitators should treat

students seriously, value their opinions, and be motivated and interested. Attention to group dynamics and to individual group members is important. The facilitator should encourage quieter students to participate. Learning facilitation requires time and effort. More universities in developing countries now offer a workshop for faculty on facilitation skills.

2. Create a safe and supportive learning environment

Student voices in the group should be valued. Learning has motivational and emotional components, and these should be considered by the facilitator [3]. Students should develop the skills for lifelong learning and become reflective practitioners. Groups are likely to multiethnic and multinational, and the voice of each team member should be respected. A common language, usually the medium of instruction should be chosen and all group communication should be in this language. This may reduce the risk of any possibility of favoring a particular language. A set of ground rules should be agreed on at the beginning and be strictly followed. Students (especially in developing nations) may be younger and be used to being passive recipients of knowledge and the switch to active learning will need support and guidance [4]. Comfortable seating, a closed room and freedom from disturbances is important.

3. Allow students to take greater ownership of the process

Students should be allowed to take greater ownership of the process. Students take increased responsibility for their learning and develop team working, negotiation, time

management, leadership, increased initiative, and self-awareness [5]. A study however, found students had a greater understanding of the importance of taking responsibility for self-learning than supporting the learning of peers [6]. They were aware of the importance of supporting peer learning but did not often put this into operation. A facilitator should encourage each student to give their best, support their peers and be responsible and invested in the group's success. Poor communication among team members, social loafing, free riding, and unequal work distribution can impact group dynamics and should be addressed. Students in developing nations are used to a teacher-centered approach and require support and encouragement especially during the first semester of the course.

4. Spend time on writing and selecting the cases

The problem/case is at the heart of the PBL. They should integrate the clinical and the basic sciences with professionalism and psychosocial components, encourage group discussion and participation in the different steps of PBL, promote collaborative learning and SDL and teamwork [7].⁷ PBL cases are usually written by writing teams, are based on educational objectives and may require testing, rewriting, editing and customization. The initial trigger should be engaging, and a detailed facilitator guide is required. Student and facilitator feedback should be encouraged. I have seen some cases that do not work well, and students struggle to identify the learning objectives and sometimes the case may not promote group work and discussion. Hospital and community cases that are anonymized and

modified could be considered. Simpler problems are recommended during the earlier semesters and the cases can become more intricate and complex as students' progress.

5. Arrange a chart/whiteboard/online document during the session

During PBL, the facilitators provide scaffolding to support learning and as the groups learn to work together this support is slowly reduced. Visualization tools like whiteboard, an electronic whiteboard, or a shared online document help this process and ensures all group members are working on a single reference document. Screen sharing of online documents were widely used during online sessions during the COVID pandemic. In my university and many others, we continue to use online groups to share triggers and an online document to analyze the problem and develop learning objectives. Whiteboards are now common in most universities in developing countries and a few even have interactive whiteboards.

PBL is well-established in developed nations and is now becoming more common in the developing world including Nepal. With large class sizes and student numbers there is a requirement for a large group of facilitators. Greater attention to and practice of these strategies/considerations will enhance small group work, promote student engagement, and help make PBL more enjoyable, productive, and effective for both learners and facilitators.

REFERENCES

1. Chakravarthi S, Nagaraja HS, Judson JP. An exploration of the strategic challenges of problem based learning (PBL) in medical education environment: A paradigm shift from

traditional lectures. *Indian J Sci Technol* 2010; 3:216-221.

2. McLean M. What can we learn from facilitator and student perceptions of facilitation skills and roles in the first year of a problem-based learning curriculum? *BMC Med Educ* 2003; 39.
3. Bate E, Hommes J, Duvivier R, Taylor DC. Problem-based learning (PBL): Getting the most out of your students—Their roles and responsibilities: AMEE Guide No. 84. *Med Teach* 2013; 36:1-12.
4. English MC, Kitsantas A. Supporting student self-regulated learning in problem-and project-based learning. *Interdiscip J Probl Based Learn* 2013;7(2):6.
5. Ghaemi RV, Potvin G. Students' perspective: does problem-based learning increase ownership of one's education? *Proceedings of the Canadian Engineering Education Association (CEEA)*. 2020 Jun 11.
6. Ayish N, Deveci T. Student Perceptions of Responsibility for Their Own Learning and for Supporting Peers' Learning in a Project-Based Learning Environment. *International Journal of Teaching and Learning in Higher Education* 2019;31(2):224-237.
7. Azer SA, Peterson R, Guerrero AP, Edgren G. Twelve tips for constructing problem-based learning cases. *Med Teach* 2012; 34(5):361-367.