



## Problem-based learning: Where are we now? Guide supplement 36.1 – Viewpoint

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## AMEE GUIDE SUPPLEMENTS

# Problem-based learning: Where are we now?

## Guide supplement 36.1 – Viewpoint<sup>1</sup>

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### Abstract

The AMEE Guide No 36 by Taylor and Mifflin (2008) provides an excellent resource about the current status of problem-based learning (PBL). The authors discussed the roots of PBL and generated hypotheses about possible causes for the confusion about PBL. They also discussed a number of challenges facing PBL. The guide is worth reading by novice PBL tutors and experienced medical and health educators. In this article, I would like to reflect on some of the challenges facing PBL and provide an insight into practical issues related to these challenges.

### Introduction

As I plan to write this supplement and re-read the AMEE Guide No. 36 by Taylor and Mifflin (2008), I go back with memories about my work in the area of problem-based learning (PBL) at universities in Australia, Japan, Malaysia, and Saudi Arabia. I feel honored to receive such opportunities and be able to examine PBL in a different environment. There is no doubt that there are differences at university and country levels about what makes a PBL curriculum, what constitutes a good PBL case, and how much clinical information should be included in the preclinical years. In the excellent AMEE Guide by Taylor and Mifflin, the authors discussed the roots of PBL and generated hypotheses about possible causes for the confusion about PBL and these differences. They supported their views from the literature and reflected from their experiences in PBL. There is no doubt that our understanding of PBL has developed over the years, and there are new dimensions and educational strategies that have been introduced to maximize the learning outcomes in PBL programs. Despite these changes, there are several issues unresolved about PBL and new challenges that we need to address. The AMEE Guide addresses these challenges, and the authors have presented valuable explanations to the reader. The Guide is definitely useful and worth reading by novice PBL tutors and experienced educators. In this article, I would like to reflect on some of the challenges facing PBL and provide an insight into practical issues related to these challenges.

### Beliefs about PBL

One of the most challenging issues that faces medical educators when introducing PBL and making changes to the curriculum is how would medical educators respond to staff

beliefs and views about PBL? How would they use differences in views to strengthen their educational programs and see benefits and values behind these differences? The authors of the AMEE Guide reminded us that different educational views are usually perceived as resistance rather than as legitimate alternatives to the new views. Therefore, teachers' antagonizing views could be attributed to emotion, and illogical assumptions (Margeston 1991; Jason 2000). In many instances, their views are ignored. However, I believe that medical educators should give attention to teachers' views, the sources of their fears, and how to use these views in cultivating the change. If we look closely for the sources of these differences in views, we could identify at least four causes: (1) lack of information, and/or experience about PBL, (2) fragmented knowledge about PBL that is not up-to-date, (3) unsuccessful previous PBL experience, and (4) failure to realize changes introduced to PBL. Therefore, it is no surprise to say that these differences in views about PBL are not bad news. From my experience, one of the keys for success in such situations is to give priorities to such questions, use them in promoting the new curriculum, and involve staff in the teams writing new cases.

The authors of the AMEE Guide stress that the dissemination of the PBL conception has created confusion in the understanding and practice of PBL, and hence caused difficulties in the interpretation of research on PBL. Although this could be one of the contributing factors for the differences in what is labeled in the literature as a PBL curriculum, other causes may be responsible: (1) incomplete training of educators about different skills required in a PBL curriculum; the insufficient training and lack of expertise could result in a different interpretation and a different understanding of PBL; (2) rushing in the design of the curriculum resulting in poor preparation and insufficient staff training; and (3) purchasing a

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curriculum from another university and ending with major changes that could affect the educational purposes and outcomes.

## The PBL tutor

The authors of the AMEE Guide raised an important issue about the role of PBL tutors. They provided the readers with two extremities mentioned in the literature. At one end of the spectrum, Shields et al. (2007) who believed that PBL tutors should turn the tutorial into a discussion session. At the other end, the description by Mifflin et al. (1999) and others, PBL tutors are trained not to intervene in the PBL process. These differences in the literature about the role of PBL tutors might contribute to unresolved issues about what makes a good PBL tutor. I believe that the tutor's role in PBL should not be for any of these extremes. We all agree that the primary role of a PBL tutor is facilitation. Therefore, tutors should not direct or dominate the group discussion neither take a passive role in the group discussion. A good tutor encourages members in the group to work as a team, enhances student-centered learning, and provides constructive feedback to the group. However, there are specific issues that might spoil the tutor's roles, and faculties should offer appropriate training that could help in overcoming such shortcomings. For example, (1) tutors who do not master the contents of the block/module and rely on textbooks to organize their instruction, (2) tutors who develop the habit of not attending the briefing sessions or making little effort to prepare for tutorials, and (3) a tendency to use teacher-centered approaches.

## Self-directed learning and PBL

The authors of the AMEE Guide highlighted how the conception of self-directed learning (SDL) is held as central to adult learning and PBL. However, several authors raised concerns about this generalization, and whether SDL could be achieved automatically by introducing a PBL curriculum. In PBL, students direct their learning by identifying unknown issues in relation to the case. However, SDL is not just about researching for new knowledge or finding answers for questions; SDL is about developing competencies, skills, and attitudes that foster the learning processes. The authors of the AMEE Guide reminded us how small group work was embedded into the conception of PBL, and this enabled the dual role of security and authority (students) needed for their own learning (Barrows & Tamblyn 1980). This includes members taking role to enhance their learning in their groups. However, this generalization did not allow us to explore what should we do in regard to members with less contribution to the group discussion. Sometimes the tutors describe them as "quiet students," "less contributing students," or "a student who is dependent on others". These students usually avoid taking responsibilities in their group. An attitude that might imply a lack of accountability.

In conclusion, this is an important AMEE Guide for all healthcare professionals. The authors stress the importance of the definition of PBL, the educational developments introduced to PBL, and discuss how the dissemination of the PBL conception created confusion in the practice of PBL. The Guide provides a strong evidence from the literature on key and theoretical issues about PBL, and examines practical aspects for some of the emerging issues. Throughout the Guide, the authors offer us from their experience many pearls of wisdom, and justify their views with evidence. The Guide highlights areas of deficiencies in medical education research and areas that need further studies. On these bases, the Guide is of great help to course designers, PBL tutors, and those involved in medical education research.

**Declaration of interest:** The author reports no conflicts of interest. The author alone is responsible for the contents and writing of this article.

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## Note

1. This AMEE Guide was published as Taylor, D, Mifflin B. 2008. Problem-based learning: Where are we now? AMEE Guide no. 36. Med Teach 30: 742–763.

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