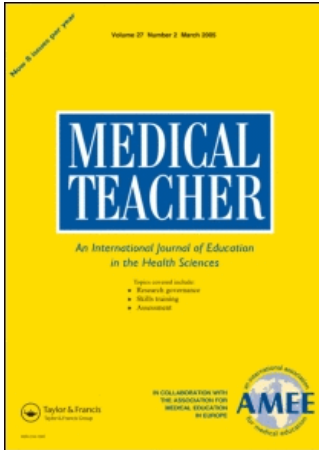


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Challenges facing PBL tutors: 12 tips for successful group facilitation

Samy A. Azer^a

^a Faculty Education Unit (FEU), Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne. Victoria. Australia

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TWELVE TIPS

Challenges facing PBL tutors: 12 tips for successful group facilitation

SAMY A. AZER

Faculty Education Unit (FEU), Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Victoria, Australia

SUMMARY One of the main tasks of a problem-based learning (PBL) tutor is to facilitate group discussion. Group facilitation is about process rather than content. In this process, a tutor helps the group increase their skills and progress in their discussion. Several studies have highlighted strategies and training used in preparing PBL tutors. However, PBL tutors usually feel that it is not that easy to change their teaching style to the PBL format. They are sometimes unsure about their role or what strategy they might use to facilitate their students' discussion. This article in the '12 Tips' series is a detailed description of, and provides answers to, common challenges faced by PBL tutors. The tips provided in this manuscript should help tutors with practical answers. The article may be useful to PBL tutors, medical and health educators and those responsible for PBL training workshops.

Introduction

Facilitation is not about detailed content or what the group works on, it is more about how the group approaches big concepts, identifies open ended questions that encourage group discussion and how the group identifies their learning needs and what they need to know (Barrows & Tamblyn, 1980; Barrows, 1988; Weizel, 1996). The aim of facilitation in problem-based learning (PBL) tutorials is to make the process easier and more convenient rather than answer questions or provide a lecture. The facilitator keeps the group focused on their tasks and guides them to achieve their goals (Evans & Taylor, 1996; Maudsley, 1999; Neville, 1999; Azer, 2001; Cannon & Newble, 2002; Azer, 2004).

Several studies have highlighted strategies and training techniques used in preparing PBL tutors for their role (Grand' Maison & DesMarchais, 1991; Finucane *et al.*, 2001; Haith-Cooper, 2003a, b). Training PBL tutors seems to be a crucial component of successful curriculum change (Farmer, 2004) and should be delivered by an experienced educator in PBL. However, there are a number of challenges raised by most PBL tutors particularly those who have just started tutoring after completing a PBL training program. For example:

- 'How can I ensure that the group is moving in the right direction? Is there anything I need to do when I first commence my role as the group's tutor?'
- 'How can I facilitate the discussion without dominating the group?'
- 'How can I encourage understanding and creative thinking?'

The tips provided in this manuscript should help you with practical answers.

Tip 1

Ask your group to identify their ground rules in the first tutorial

Ground rules highlight behaviour welcomed by group members and the core values of effective group discussion. It is important to consider cultural issues in setting ground rules (Das Carlo *et al.*, 2003). In recognition of the increasing diversity of our students, it is important that you encourage rules that enhance respect to people in the group from diverse cultures and belief systems. This is particularly important when a PBL case addresses cultural, ethical and moral issues (Loudon *et al.*, 1999; Nunez, 2000; Crosson *et al.*, 2004). International, ethnic and minority students should be encouraged to reflect on their cultural views and how people from their culture will perceive and react to such situations.

- Ground rules should be identified by group members.
- When the group breaks a rule, remind them of the identified rules.
- Examples of ground rules may include:
 - Turn off mobile phones during tutorials.
 - Everyone should come on time.
 - We should respect each other's opinions.
 - Listen to one another.
 - Everyone should contribute to the case discussion.
 - When we do not agree on a point, we should debate our differences in opinion rather than argue.
 - When we discuss cultural, ethical or moral issues we will listen to the different views we have in the group.

The tutor might have his/her own rules. Examples include:

- No one should turn the page until I say to.
- Every group member must have a turn at the different roles within the group.

Correspondence: Dr Samy A. Azer, FEU, Faculty of Medicine, Dentistry and Health Sciences, Medical Building, Level 7, North Wing, University of Melbourne, Parkville 3010, Victoria, Australia. Tel: 61-3-83448035; fax: 61-3-83440188; email: samy@unimelb.edu.au

Challenge: what would you do if you were the tutor?

Your group consists of seven school leavers (students with no prior university degree) and three graduate entry students (students with a prior university degree): Garry, Sylvia and Jess. Garry has a Bachelor degree in Medical Sciences and enjoys commenting on his previous experiences at University. During today's tutorial, you notice that on three occasions he tries to force his own views upon the group, regardless of the opinions of other students. You know that what he is arguing is not scientifically correct. Sylvia has different views. She tries to explain the other students' views, but fails to persuade Garry to agree with the group. She seems unhappy with Garry's attitude, and becomes disinterested. The scribe looks at Garry for some time, then he looks at you. As it was difficult for him to find anything to write, he goes back to his chair. Two students seem to be uninterested. The other students are still arguing with Garry. At this stage, one of the students asks you if she can go to the toilet.

Comments. The group looks dysfunctional and needs ground rules. If the group already has ground rules, remind them that 'we should appreciate each other's views and should listen to one another'. The other part of the solution to this challenge is to bring the discussion to the whiteboard. The group will need a scribe to record the different views of members. You may encourage the group to restart the discussion with a new focus. Encourage the group to debate issues rather than argue and ask them to provide evidence. If Garry continues to argue you might suggest that he research that issue for the group and bring the outcomes to the next tutorial. This will help Garry to realize that he was arguing for no reason. It might also highlight for him the need to acknowledge others' views and focus on evidence as he discusses an issue in the future. If Garry continues his disputative attitude in the next tutorials, you will need to talk to him privately.

Tip 2

Discuss with your group the different roles they may play

When students are aware about their roles in PBL tutorials and what they need to do, they usually perform better and group dynamics are maintained.
What should I say to my group?

- A scribe listens to each member's input, records and organizes information discussed on the whiteboard, encourages every member to contribute and knows how to serve the group.
- Every member contributes to the discussion in a way that adds new information, deepens group understanding, acknowledges others' input, focuses on the issue and avoids negative arguments.
- A group recorder summarizes all the information on the white board and makes a copy available to every member of the group after the tutorials.
- We might need to use resources as we discuss the case, for example, use the medical dictionary to search for new terms, the anatomy atlas to find a structure or an organ, and the Pharmacology Handbook to find out the

indications, contraindications, mechanisms of action or side-effects of a medication.

- One of the students could be nominated by the group to be the group representative.
- Apart from the group representative, students rotate roles every tutorial. A student may have more than one role in the same tutorial.

Challenge: what would you do if you were the tutor?

Today is tutorial two. One of the students has researched a learning topic, but has not been able to provide adequate information about the learning issues. Another student tries to help him and explain some points, but soon they start talking amongst themselves, excluding the rest of the group. A third student joins in, but all his comments seem to be off track. Two of the students are reading their notes. The rest of the group seems relaxed.

Comments. This problem usually occurs when there is no scribe. To explain issues such as this, you need to use the whiteboard. Encourage the use of diagrams and flowcharts. The use of the whiteboard and a scribe will allow all the group members to contribute. This approach will minimize confusion and help in the clarification of the issue.

Tip 3

Build trust and encourage bonding of group members (Schmidt & Moust, 1995)

In a small group, six developmental stages have been described: orientation, formation, storming, norming, performing and terminating (Tuckman & Jensen, 1977). In the initial stages of group development, group members get to know one another, establish communication patterns and agree on the ground rules and roles of members. However, at these early stages group members tend to work in a more individual pattern rather than as a team. Members are reluctant to challenge each other's ideas or take responsibility for decision-making (Benson *et al.*, 2001). Building trust in the group is the key to enhancing group performance. The following actions may help in establishing trust:

- Don't criticize anyone.
- Never label students.
- Avoid adopting an attitude that can cause biases.
- Encourage teamwork.
- Be a good listener and encourage effective communication.
- Value the potential of each group member.
- Catch students in the act of doing something good.

Challenge: to build group trust you require time

You are joining a PBL group in week three because the tutor of the group has been ill and admitted to the hospital. It is most likely that you will be the tutor for the group until the end of the semester (another 9 weeks). You are not happy with the group performance and the way they discuss the case. You also notice in their comments that they prefer the

way they are used to doing things. One week later you start giving them direct instructions about what they should do. You look at two quiet students and ask them to contribute to the discussion. The next tutorial you notice that most members in the group are disinterested and the discussion has become slower than it used to be. There is a strange feeling in the room.

Comments. People in your group will not develop their skills and be able to work together instantly. The whole aim of collaborative learning is to allow people to develop skills by learning from other members in the group. This process requires the establishment of trust within the group. Learning from other group members may include a wide range of skills including:

- Enhancement of their communication skills
- Development of listening skills
- Turning from arguing to debating
- Appreciating the views of other group members
- Increased self-awareness

These goals cannot be achieved instantly. Tutors are usually impatient and worried about students who avoid interaction with others. It is important to remember that it will take time for some students to develop these skills.

Tip 4

Do not dominate group discussion but rather facilitate the process.

- Think empower, not control.
 - Get feedback on your teaching style.
 - Do not rush to ask questions or provide information.
- One of the students in your group will soon say what you want to say.
- Teach the joy of learning by discovery.
 - Monitor the timing and type of your interactions.

Challenge: what would you do if you were the tutor?

Your group knows that you specialize in the topic under discussion. They seem to be unable to discuss the case with the depth needed. Their discussion is slowing down with no progress. You ask them a question, hoping to fuel the discussion, but they look at you and ask for the answer. Because time was wasted and you want the group to catch up, you answer them briefly. Two of the students ask you more questions in relation to the issue they are discussing. One of them says to you, 'You know all this stuff, don't you?'

Comments. A tutor should not be an information provider. He/she should facilitate the discussion. It seems that the question was asked to the group was a 'read my mind' rather than an open-ended question. The use of appropriate key questions is useful in such situations. The aims are:

- To allow members in the group to share the discussion
- To broaden the concept under discussion
- To bring basic sciences into the discussion

Tip 5

Be a role model for your group and monitor your teaching skills (Palmer 1998; Paice et al., 2002)

- Come on time to the tutorials.
- Read the tutor guide before the tutorial and think about the flow of the case and areas that may need your facilitation.
- Promote positive attitudes in the group.
- Acknowledge your mistakes.
- Ask your students to give you feedback on your facilitation.
- Monitor your teaching/facilitation skills.
- Create your own teaching portfolio and record your teaching experiences and personal and professional development regularly.
- Regularly update your knowledge about recent developments in PBL and medical and health education (e.g. attend conferences on medical/health professional education, become a member of a medical/health professional society, read recent publications on PBL, facilitation, small group learning and education).

Tip 6

Encourage understanding

What should I do to facilitate understanding in my group?

- Motivate students to act flexibly around what they know.
- Ask questions that allow students to assess, evaluate, compare, weigh evidence, make priorities, interpret, seek information, take decisions, plan their approach and use resources.
- Guide students to use their knowledge to construct their own flow diagrams and mechanisms.
- Encourage students to use basic sciences to explain patient's symptoms and clinical signs.
- Ask students to provide the reasoning behind their opinions.
- Enhance the use of diagrams in the discussion of difficult concepts.
- Encourage lateral thinking and making links.

Tip 7

Foster critical thinking and enhance the group's ability to

- Debate issues rather than argue
- Weigh evidence as they rank/refine their hypotheses
- Analyse data and information provided
- Synthesize information into informed conclusions
- Emphasize understanding over memorization.

Challenge: how can I enhance my group's discussion as they refine their hypotheses?

Students in the group may find it difficult to refine their hypotheses. They might ignore evidence collected via medical history and clinical examination and start guessing.

Comment. A good facilitator might ask the group to use all the hypotheses suggested by group members. The tutor might also suggest creating a large table addressing all these possible hypotheses and ask students to look for supportive evidence for each hypothesis. Students might then discuss evidence against each hypothesis. This strategy will help the group to:

- Understand the value of assessing each hypothesis on the basis of evidence.
- Realize that ranking hypotheses is not a guessing exercise.
- Learn why other hypotheses were not correct.
- Realize the value of key information provided in the history and clinical examination.
- Develop their interpretation skills.
- Ask questions that gradually moves discussion forward.

Tip 8

Ask open-ended questions that:

- Expand discussion and allow more members in the group to contribute.
- Keep the group focused on issues discussed.
- Foster self-directed learning.
- Help understanding difficult/complex concepts.
- Make students realize the significance of basic sciences in their discussion.
- Help students make priorities between their hypotheses.
- Allow students to see the big picture as well as some fine details.

Challenge: how can I facilitate discussion in a way that helps my students realize the significance of basic sciences?

Students are discussing three problems in a trigger: (1) upper abdominal pain; (2) vomiting; and (3) dark urine. They include the following hypotheses (causes) for the first problem:

- Peptic ulcer
- Food poisoning
- Angina

They are unable to find more causes. They move to the second problem but the tutor stops them and asks 'What else could cause upper abdominal pain?'. The students are silent for a while then two of them start guessing. Most of the answers are not related to the case scenario. They are unable to progress and one of them says, 'We do not know. We might consider this as a learning issue'.

Comment. Asking 'what else' is like asking students to read your mind. This approach will not help in the progression of discussion and will keep students focused on clinical diagnoses rather than basic sciences. This might be important to your group in the early years of the course. Effective facilitation of such a situation may necessitate asking two key questions:

1. *What are the structures in the upper abdomen that can be a source of pain?* Let us list them on the whiteboard. We may also use a diagram to show their location. Students will come

up with structures such as: skin, stomach, duodenum, pancreas, liver, gallbladder, transverse colon, etc.

2. *What could possibly go wrong in each of these structures/organs and produce pain?* Students may continue and say: 1. Stomach: inflammation, ulcer, tumour; 2. Pancreas: acute inflammation; 3 Gallbladder: inflammation, stones in the duct; 4. Liver: inflammation; 5. Transverse colon: inflammation, spasm etc.

These two key questions will help students in your group to:

- Realize the value of basic sciences, e.g. anatomy, physiology, pathology, pathophysiology.
- Generate more causes (hypotheses) and avoid guessing.
- Progress in the discussion of the case.
- Address the issue at the depth needed.
- Realize the value of using diagrams.
- Discover the value of good open-ended questions in moving the discussion forward.

Tip 9

Promote group dynamics (Thomas, 1997; Barrows, 1988)

- Always say 'we'.
- Focus on gains, not losses.
- Ask questions, listen and encourage everyone to contribute.
- Sustain ongoing interaction.
- Foster accountability.
- Empower your group.
- Positive expectations yield positive results.

Challenge: what would you do if you were the tutor?

Two students in your group have hardly been contributing to the discussion since the beginning of the semester. It is now the fourth week and you notice no change. At the end of the tutorial, you talk to them separately. They both tell you that they understand everything in the tutorials and have scribed each on two occasions. They promise that they will contribute more. Over the next two weeks, you notice that there is no change in their attitudes.

Comments. Encouragement and motivation should start very early, particularly for quiet students. When you talk to students, you need to arrange a meeting with them. Don't give feedback in a hurry, e.g. in the corridor after a tutorial. The aim of the meeting is to find out the reasons for their lack of contribution. Not every quiet student has poor English. You need to find out other contributing factors, such as how welcome and comfortable they feel in the group, if there are any reasons that hinder them from contributing, suggestions or ways to enhance their contribution, support for international students regarding the English language etc., and the need to have regular meetings as a way of support. Motivation and encouragement is important. The learning style could be a problem, and students need to know about better preparation techniques, effective learning and use of resources. Confidence and self-esteem are also important factors.

Tip 10

Solve problems in the group with a win-win approach

Conflict is often indicative of liveliness and innovation in a group. The essential thing for the tutor is to monitor the level and source of conflict and actions should be taken by the tutor if it becomes detrimental to students' learning (Sampson & Marthan, 1990). The keys for success when you deal with a problem in the group are:

- Take challenges as opportunities for everyone's success.
- Consider decisions that give as much value as possible to everyone concerned.
- Keep focused on principles and values.
- Focus on relationships rather than rules.
- Document problems with difficult students.
- Consult with a colleague you trust about possible solutions.

Tip 11

Provide feedback that builds the group up (Barrows, 1988)

- Remember that feedback is the breakfast of champions.
- Address positive issues first, state issues that need improvement second.
- Be specific and provide examples when needed.
- Discuss with the group strategies and approaches for improving performance.
- State the feedback clearly and follow up issues identified.
- Maintain a weekly teaching journal about the input/contribution to the discussion and the role of each student in your group.

Challenge: what would you do if you were the tutor?

It is the second week of the semester. The tutorial was going well until one of the male students made a serious sexist comment to the scribe. She looks very embarrassed and the whole group is silent for a moment. Then one of the girls tries to resume the discussion. You look at him and you find him laughing and talking to the person next to him.

Comments. This is an important incident that should be managed immediately. The student who made the comment, as well as the group, should realize that there is no place for such offensive comments in the group. Your body language should show that you are not in agreement with that attitude at all. Group members should be encouraged to handle and deal with such problem. You might encourage and facilitate the discussion of such an important issue and ask members to reflect on their concerns and what will be the best options to avoid such instances in the future.

Tip 12

Tell them about your roles (Barrows & Tamblyn, 1980; Neville, 1999)

In the first tutorial discuss with your group your role and in what way it will be different from what they expect from

a teacher in a traditional course. You may summarize your responsibilities into the following:

- Facilitation of discussion.
- Asking open ended questions when needed to encourage group discussion.
- Enhancement of use of educational tools during tutorials.
- Providing suggestions.
- Summarizing key points raised in the discussion.
- Helping in the creation of an open, healthy environment that encourages group discussion, experimentation and dealing with uncertainty.
- Providing feedback to the groups at the end of the case and receive feedback from the group.
- Monitoring students' progress.
- Running group assessment.

In conclusion, these 12 tips are not an exhaustive guide to effective group facilitation. However, they contain the basic principles for becoming a successful PBL tutor. It might be useful to study these tips not only prior to commencing your role as a tutor, but also at intervals throughout the semester/academic year. Think about methods of implementing these tips in your teaching. Use reflective journals and regularly record your teaching experiences. Read books, educational reviews and research articles related to these tips and expand your knowledge and skills in group facilitation. Ultimately, aim to motivate yourself to achieve the essence of these tips in your teaching.

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Notes on contributor

SAMY A. AZER, MB, BCh, MSc, MEd (NSW), PhD (Syd), FACG, is a Senior Lecturer in Medical Education and the Director of the PBL Training Programs at the Faculty of Medicine, Dentistry and Health Sciences, the University of Melbourne, Australia. Over the last five years he has trained over 500 tutors in his workshops 'Becoming a PBL Tutor', 'Challenges Facing PBL tutors' and 'Creation of Trigger Images, Writing PBL Cases and Tutor Guides'. Participants in his workshops were from a wide range of back grounds including Basic Sciences, Physiotherapy, Nursing, Occupational Therapy, Dentistry, Speech Pathology, Medicine and its subspecialties, and Primary and High School Teachers.

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