

KATE EXLEY AND REG DENNICK

SMALL GROUP TEACHING TUTORIALS, SEMINARS AND BEYOND



SMALL GROUP TEACHING TUTORIALS, SEMINARS AND BEYOND

Why do small group teaching styles need to be so different to those used in tutorials and lectures?

How will my teaching style need to adapt?

This indispensable guide for new lecturers, college lecturers, group teachers, and those who teach in small groups, covers a wide range of issues, as well as examples of practice from across disciplines, and a selection of sound educational theory.

Written in a highly accessible, readable style, this book is an essential reference for all those who teach in small groups.

- the underpinning foundations and dynamics of small group teaching;
- the role and skills of the effective tutor;
- tried and tested small group teaching methods and techniques;
- guidance on problem based learning, student-led and tutor-less tutorials;
- up-to-date advice on inclusive and non-discriminatory practice;
- a review of assessment criteria and methods.

The book offers much practical support and guidance for new and part-time teachers in further and higher education, covering a wide range of teaching scenarios. It will also be useful reading for all those who wish to refresh or improve their teaching.

Kate Exley is an Educational and Staff Development Consultant and Tutor at the University of Birmingham. **Reg Dennick** is Assistant Director of Medical Education, University of Nottingham.

Key Guides for Effective Teaching in Higher Education
Series Editor: Kate Exley

Cover design by David D. Jones

Visit www.routledge.com/teaching for more

Further/Higher Education

ISBN 0-415-30717-1



9 780415 307178

RoutledgeFalmer
Taylor & Francis Group

TABLE 3.1 Facilitator dimensions and modes

	Planning	Meaning	Confronting	Feeling	Structuring	Valuing
Hierarchy						
Co-operation						
Autonomy						

COMMUNICATION SKILLS

The ability to listen, respond, explain and question effectively are part of a set of key communication skills that all facilitators of SGT should possess. Questioning is of such importance that it will be dealt with in more detail in the next section.

Active listening

Listening is more than just having a fully functional auditory system that picks up speech. In the same way that merely seeing can be augmented by deliberate, focused observation, hearing the utterances of others can be raised to higher levels by active processes ensuring that all messages are received and that the speaker knows that the message has got through.

There are a number of techniques that SGT facilitators should be aware of. For example, keeping eye contact with a speaker and acknowledging what he or she says by appropriate body language, such as nodding and verbal agreement, is essential for active listening. It is not acceptable to ask a question and then let your attention wander and appear uninterested when someone answers. A further way for facilitators to indicate that they have been actively listening is to summarize or paraphrase what has just been said: 'So what you're saying is . . .'. This is sometimes termed 'reflecting back'.

Responding and explaining

These two communications skills can be dealt with together as they overlap. Facilitators responding to student comments, questions and suggestions should always demonstrate respect, understanding and empathy. If an explanation is required this should use language and concepts that the student will understand. If necessary questions may be asked to clarify

the student's understanding and an explanation can then be given at an appropriate level using examples and analogy if appropriate. Further questions can be used to ensure that the student has fully understood.

QUESTIONING

The questions a teacher asks can make the difference between an antiquated wasteland and an exciting learning environment.

(Carin and Sund 1971: 23)

If active learning is the hallmark of higher educational thinking then the use of questions and questioning skills is the simplest active learning technique. When learners hear a question, they have to think; whether they respond is another matter.

I keep six honest serving men
(They taught me all I knew);
Their names are What and Why and When and How and Where
and Who.

(Rudyard Kipling 1912: 43)

The function of questions in SGT

Questions and questioning methods serve a wide variety of functions in SGT and are involved in the following processes:

- arousing interest
- activating prior learning
- diagnosing strengths and weaknesses
- checking progress and understanding
- assessing achievement
- controlling group dynamics by encouraging participation and discussion
- encouraging deep-level thinking and active learning
- reviewing and summarizing.

Arousing interest

Questions at the beginning of a SGT session can arouse interest and motivation. Big questions like 'Do you know what proportion of the

UK National Health Service budget is spent on the treatment of diabetes and its complications?' can act as a trigger to generate a whole discussion. After a little thinking time and a few responses, the jaw-dropping correct answer (15 per cent) can act as an extremely powerful stimulus for the relevance and importance of what follows. Each discipline should be able to come up with its own set of 'trigger' questions.

Activating prior learning

Adopting a constructivist and student-centred approach to teaching implies that questions should be used at the beginning of a SGT session to evaluate background knowledge and attitudes and to activate and acknowledge prior learning. Such questions should be mandatory at the beginning of all teaching sessions but they are especially important in SGT where the aim is to encourage students to talk and discuss.

Diagnosing strengths and weaknesses, checking progress and understanding, and assessing achievement

The responses obtained from individuals after activating prior learning and evaluating background knowledge can be used to diagnose the strengths and weaknesses of the group with respect to the content to be dealt with. The facilitator might then have to briefly review and summarize key points seen as essential for the following discussion or activity if a lack of knowledge is detected. Alternatively, if the group appears knowledgeable, the cognitive level of the work to be carried out could be raised appropriately. Clearly, further questioning during the session can be used to diagnose how well the group is operating and to check understanding. Finally, questioning towards the end of the session can be used to assess how well the group has achieved its learning objectives.

Controlling group dynamics by encouraging participation and discussion

However, one of the most important questioning techniques in SGT is aimed at controlling group dynamics by encouraging participation and discussion. Remember that the initial objective of SGT is to encourage group members to talk and without achieving this none of the other objectives will be achieved. However, questions can often seem

intimidating to participants, resulting in an inhibition of participation, so careful consideration needs to be made to the types of questions that are asked and the manner in which they are presented. This is why it is important for a facilitator to be aware of different question types and to know when it is more or less appropriate to use them.

For activating prior learning simple, closed, knowledge recall questions are ideal, initially the simpler the better. After introductions and ice-breaking have been performed, asking questions that students should know the answer to is more likely to encourage a response and even further participation. By gradually introducing more cognitively demanding questions later students will be more likely to respond, whereas if they had been presented earlier they might have resulted in a blank response.

Encouraging deep-level thinking and active learning

The facilitator should be aware of the various cognitive levels of questions and use them appropriately to encourage deep level thinking. Questions aimed at the higher levels, such as analysis or critical evaluation, should be aimed for.

Reviewing and summarizing

Although the facilitator can always review progress and summarize the key learning objectives, a useful technique is to question the group on what they feel they have achieved. Going round the group asking individuals what they feel they have learned or achieved provides an active and participatory closure to the group's activities.

Categories of questions

Questions and questioning techniques can be categorized in a number of ways:

- closed (or convergent) questions
- open (or divergent) questions
- questions aimed at different levels of the learning hierarchy
- probing questions.

These categories are further examined below.

Closed questions

Closed questions are also known as convergent questions as the question is concerned with an item of factual information and homes in or converges on the specific answer. Closed questioning may ask learners to name or identify an object or concept, to define or state a definition of a principle or rule or to compare or contrast two or more processes or systems. The answer to these questions is clearly right or wrong and in fact many closed questions merely involve learners stating yes or no. Closed questions are found at the lowest levels of the cognitive hierarchy and involve simple recall and comprehension. The type of thinking and verbal response elicited involves memory, description, explanation, comparison and illustration. Learners at this level may be asked to explain or illustrate the meaning of key concepts as a way of demonstrating comprehension.

Closed questions are useful in establishing and activating prior learning at the beginning of a SGT session. Because they should be easy to answer they are also useful in warming up learners prior to more complex, open questions.

Examples of closed questions

- What is the name of that bone?
- Define the second law of thermodynamics.
- Who developed the philosophy of dialectical materialism?
- Explain how a . . .
- Compare the two main methods of . . .

Open questions

In most cases open or divergent questions have several possible responses or no fixed response. They may ask learners to defend or justify a particular course of action or moral position. They might involve learners having to apply their knowledge in new, problem-solving or creative situations. They might ask learners to make judgements requiring the use of evidence. They require more elaborate and thoughtful answers and usually cannot be answered by the simple recall of factual information. They elicit and require deep-level thinking involving the higher levels of the cognitive hierarchy. They can involve, for example, application and problem solving in novel situations, analysis of complex

concepts, creative speculation, planning and the making of decisions based on the critical evaluation of evidence.

Although a 'big' open-ended rhetorical question is often a useful trigger at the beginning of a SGT session, in terms of questioning dynamics the use of open-ended questions should be reserved for later in the session after the group has been warmed up. Open-ended questions early in a discussion session may be perceived as intimidating and could inhibit participation.

Examples of open questions

- How would you justify making abortion a right of all women?
- What assumptions underpin the abandonment of objective truth in postmodernist thinking?
- How would you make smoking illegal in all public buildings?

In general terms closed questions are aimed at the lower levels of the cognitive hierarchy, whereas open questions are aimed at higher levels. However, the responses obtained from learners are influenced by their degree of competence and experience. In some cases experienced or knowledgeable learners will treat an open ended question as if it were closed. Asking someone in this situation to make a complex judgement or to evaluate evidence may result in the learner simply recalling a predetermined response based on prior knowledge and experience.

Questions aimed at different levels of the learning hierarchy

Bloom's cognitive hierarchy, shown in the left-hand column of Table 3.2, not only is useful in developing learning outcomes for teaching sessions but also can be used to formulate different levels of questions, particularly in the cognitive domain of learning. For most purposes Bloom's six levels are an appropriate framework for thinking about questions.

It can be seen that using questions aimed at different levels of the hierarchy will make students think in different ways, from simple recall through application and up to problem solving and critical evaluation. All SGT facilitators need to be aware of the importance of pushing learners to their cognitive limits, an awareness of questioning levels is very useful in this respect.

TABLE 3.2 Questioning at different cognitive levels

Cognitive level	Types of questions	Examples
Evaluation	Questions involving making judgements on the basis of standards, criteria, rules or the critical evaluation of evidence (problem solving)	Judge, defend, evaluate the evidence for, justify
Synthesis	Questions aimed at the creation of new ideas, concepts or plans (problem solving)	Create, speculate, design, plan
Analysis	Questions aimed at analysing assumptions, reasons or evidence (problem solving)	What are the assumptions? What's the evidence? How does this fit together?
Application	Questions aimed at applying or using knowledge in new situations or problems	How would you? What would you do in this situation?
Comprehension	Questions aimed at reformulating or explaining existing knowledge	Compare, contrast, explain, differentiate between
Knowledge	Questions aimed at recalling factual information	What's that called? Define, describe, give me an example of, list some of the causes of

Probing questions

Although SGT facilitators may plan to use specific types of questions at particular points in the session, there will always be situations where additional questions encouraging learners to clarify or elaborate their initial responses are required. These probing questions and questioning sequences can occur in response to open or closed questions or questions directed at different levels of the cognitive hierarchy; they can enable the facilitator to ensure that deep-level understanding is taking place or to diagnose misunderstandings and take appropriate action. Such a sequence of questions might take place after an individual learner has not responded, or responded correctly, incompletely or incorrectly.

Probing questions can be classified into the following types:

- prompting
- justifying
- clarifying
- extending
- redirecting.

Prompting questions

A prompting question is used when a learner does not respond to a question or else gives an incorrect or incomplete answer. The question might contain suggestions or clues, a 'prompt', to the correct answer, hopefully triggering the student to make the necessary response. For example: 'Can't think of anything? Remember last session when we talked about the causes of the First World War ...' or 'No, pulmonary oedema is associated with the left side of the heart, what about problems with the right side?' or 'That's almost right, but what about the social costs?'

Justifying questions

Justification questions can be used when a learner has provided a correct answer without necessarily explaining why he or she has chosen it. Asking for justification can push learners to the limits of their understanding and is a useful means of diagnosing learners' strengths and weaknesses. For example: 'OK, but which particular category of antibiotic would you use?' or 'Yes, but what's the evidence for that?' or 'But why is it so important to do it that way?'

Clarifying questions

If a student has given a poorly articulated or incomplete answer to a question, clarification can be asked for. Students can be asked to rephrase or elaborate their answer until the facilitator is satisfied that they have answered the question satisfactorily. For example: 'So explain what that means in practice?' or 'Can you be more specific?' or 'Can you rephrase that in non-technical language?'

Extending questions

Superficial understanding is often context dependent whereas deep-level understanding is demonstrated when learners can apply their knowledge to different or new situations. By asking learners to extend and elaborate their thinking to new situations by using extension questions, they

are encouraged to think more deeply and their responses give clues to the depth of their understanding. For example: 'How would you modify that treatment if the baby was premature?' or 'Can you give me some examples from the work of Joyce?' or 'If your tax revenue was reduced by one-third what would your priorities be then?'

Redirecting questions

Redirection merely asks the same open-ended questions to different students to generate a variety of responses and to increase participation.

The questioning process

Humiliation and mental oppression by ignorant and selfish teachers wreak havoc in the youthful mind that can never be undone and often exert a baleful influence in later life.

(Albert Einstein in Calaprice 2000: 69)

As well as having a good working knowledge of questioning types, it is important that the facilitator is also aware of the effects of the questioning process itself on learner behaviour. It has already been mentioned that different types of questions are more likely to elicit a response at different points in a SGT session and can be used to warm students up.

The facilitator's attitude to asking and responding to questions is of crucial importance in creating the right questioning dynamic within the group. Here the ideas and frameworks provided by Rogers, Lewin, Maslow and Heron as discussed previously are important. Combining the conclusions of their work means that facilitators should generate an atmosphere of trust and co-operation where students feel comfortable with asking and responding to questions and where they can feel confident of exposing their lack of knowledge without ridicule or sarcastic comments. This atmosphere is crucially the responsibility of the facilitator, who should warm up the group, set the ground rules and monitor participation and progress. These conditions have already been discussed in Chapter 2 but facilitators should be aware of the anxieties and barriers that students might have when placed in situations where they will be asked questions.

The way in which questions are asked can have a significant impact on whether responses are elicited and their quality. Although in the cut-and-thrust of discussion and debate many questions will be asked, facilitators should try to ensure that their questions are clear and

unambiguous. Questions should not be too long nor should they contain too many sub-questions or conditions. They should focus on one fact, idea, concept or problem at a time. Students should be given plenty of 'think time' (at least five seconds and preferably more) to respond before either rephrasing the question or maybe using a prompting question. It is useful to tell students that they are going to have plenty of time to think about their answers. There is evidence (Carin and Sund 1971) that if facilitators leave a long silence after asking a question then students are more likely to respond and even give longer and more elaborate answers.

How the facilitator responds to an answer not only is extremely important to the student answering the question but also sends messages to the rest of the group about how they will be treated if they answer a question. The facilitator should apply active listening skills while listening to the response (see p. 38) and should wait until the complete answer has been given. Then, depending on the answer, an appropriate response should be given. If the answer is correct, this should be acknowledged, with positive and supportive feedback being given. However, if the answer is incorrect or incomplete, some of the probing questioning techniques previously discussed should be used. On no account should the facilitator use negative, sarcastic or personally demeaning language. This does nothing to improve self-esteem or self-confidence and will inhibit participation from the rest of the group.

Summary of recommendations for questioning in SGT sessions

- By appropriate ice-breaking and warming-up, ensure that learners feel comfortable in a questioning environment, exposing their lack of knowledge.
- Use closed questions at the beginning of a session to activate and monitor prior learning and to warm the group up.
- Where possible then use open questions aimed at higher levels of thinking.
- Allow plenty of think time before intervening with more questions.
- Respond to silence or incorrect responses by using prompting questions.
- Do not use sarcastic or hostile responses with learners.
- Respond to correct answers by positive and supportive feedback.