

Small group teaching

Small group teaching is effective in encouraging student engagement and discussion. Clinical teachers can use small group teaching techniques to facilitate learning in a range of settings.

This article introduces the topic of small group teaching: how small group teaching can be planned and structured and some of the techniques teachers can use to facilitate group and individual learning. It considers strategies for preventing difficult situations in groups and ensuring an appropriate learning environment.

What is a 'small group'?

What characterizes a 'small group' is not so much its size but the teaching and learning context and the way in which the teacher works with and facilitates the learning process. A typical small group is around eight to twelve learners facilitated by a teacher, but in clinical settings groups may comprise a pair of students or trainees working with a health-care team whereas other small groups may comprise 25 or 30 people. Small sub-groups can also operate within a much larger setting such as a lecture, workshop or conference. The size of the group places limitations on the tasks and functions that it might be expected to perform. *Table 1* indicates some of the constraints and positive functions relating to group size. Understanding the way in which the size of a group impacts on function is useful if you plan to break up groups into sub-groups or if there are only a small number of learners.

Small group teaching provides opportunities for learning that are difficult to

establish in large group settings, although it can be more demanding of staff, space and time. Small group teaching pays attention to group processes as well as to achievement of tasks.

The role of the teacher

There are three main activities that small group teachers have to manage simultaneously:

- Managing the group
- Managing activities
- Managing the learning.

The role of the teacher is typically that of facilitator of learning: leading discussions, asking open-ended questions, guiding process and task, and enabling active participation of learners and engagement with ideas. However, teachers need to be able to adopt a range of roles to respond to the ways small groups function and behave. Richmond (1984) sets out five key roles of the teacher in terms of the 'strategic interventions' required to maintain the group as a functional unit:

1. Start and finish group work – keeping to time, ensuring outcomes and tasks

are explained and that the activities draw to a close with learning needs being achieved

2. Maintain the flow of content – ensuring learning follows in a logical sequence and providing stimulus materials and questions
3. Manage group dynamics
4. Facilitate goal achievement – of the wider curriculum, of the session and those identified by the learners themselves
5. Manage group environment – both physical and psychological.

Group dynamics

Understanding the internal dynamics of the group and how to manage different learners makes group working more effective. One useful way of thinking about the ways in which groups develop over time is Tuckman's (1965) framework (*Figure 1*):

Forming – when a group comes together for the first time. Teachers can help by facilitating introductions, using ice breaking tasks, explaining the tasks and purpose of the group

Size	Task functions	Affective functions
Individuals	Personal reflection Generating personal data	Personal focus increases 'safety', personal focus means positive start, brings a sense of belonging to and ownership
Twos or threes	Generating data, checking out data, sharing interpretations, good for basic communication skills practice (e.g. listening, questioning, clarifying), good sizes for cooperative working	Builds sense of safety, builds sense of confidence by active involvement (self belief), lays foundation for sharing and cooperating in bigger group, reticent members can still take part
Four to ten	Generating ideas, criticizing ideas, usually sufficient numbers to enable allocation of roles and responsibilities, therefore wide range of work can be tackled (e.g. project work, problem-based learning, syndicate exercises)	Decreasing safety for reticent members, at lower end of the range still difficult for members to 'hide', this risk increases with size, strong can still enthuse the weak, size of group still small enough to avoid splintering, sufficient resources to enable creative support
More than ten	Holding on to a task focus becomes difficult, size hinders discussion but workshop activities possible, e.g. using purposeful sub-groups to address some of the issues	Difficulties in maintaining supportive climate, 'hiding' becomes common, 'dominance' temptation and leadership struggles a risk, divisive possibilities with spontaneous splintering into sub-groups

Professor Judy McKimm is Senior Lecturer (Interprofessional Education) in the Faculty of Medical and Health Sciences, University of Auckland, PO Box 92019, Auckland, New Zealand, Visiting Professor of Healthcare Education and Leadership, University of Bedfordshire and Honorary Professor in Medical Education, Swansea University and **Mrs Clare Morris** is Associate Dean, Bedfordshire and Hertfordshire Postgraduate Medical School, University of Bedfordshire, Luton

Correspondence to: Professor J McKimm

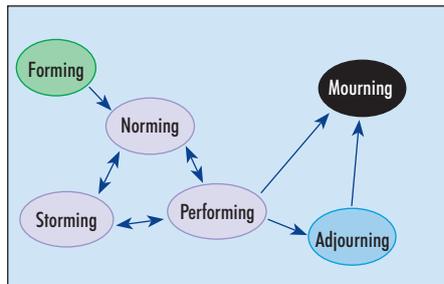


Figure 1. Tuckman's model of group process.

Norming – the group begins to share ideas, thought and beliefs and to develop shared norms (group rules). The teacher can help by clarifying ideas and ground rules, encouraging more reticent people to participate and moving the group towards its purpose

Storming – the group is actively trying to carry out a task and there may be conflict between one or more group members as the group sorts itself out and becomes more functional. The teacher can help by clarifying and reflecting ideas, smoothing over and moderating conflicts and acting as a go-between between members

Performing – the group focuses on the activity and starts to work together as a team to perform the set tasks. The teacher's role is to keep the group focussed and to encourage and facilitate as necessary.

Closure is important, the final stages include 'adjourning' (e.g after each session) or, in the case of a group that has successfully worked together, 'mourning'.

Groups can loop back into the norming or storming stages, especially if there are some personality clashes in the group or difficulties with learning or understanding the tasks. The tutor needs to keep an eye on process and well as task or outputs and intervene if necessary: 'making the right sorts of nudges and interventions ... by using more structure and less intervention in the group process' (Jacques, 2003).

Structuring small group teaching

Small group sessions work well if there is a mix of activities and timings, so that people can work individually, in different-sized groups and with and without teachers. A rule of thumb is that effective concentration on one activity (such as listening to someone talk) lasts around 10 minutes without a break or change of pace. Including breaks and different activities keeps the session flowing, and concentra-

tion and learning occurring. However, it is equally important to allow time for groups to bond and work together on shared tasks and not to keep switching people round just for the sake of it.

Types of sessions

Small group teaching takes many forms including seminars, tutorials, workshops, journal clubs, action learning sets, problem-based learning groups and case presentations (www.faculty.londondeanery.ac.uk/e-learning/small-group-teaching describes different events). When planning small group teaching, think about the learners who will be involved, the resources available (teachers, facilitators, 'experts', patients, rooms, equipment), the learners' needs and the learning outcomes that are to be achieved.

Small group teaching can be built around:

- Topics or themes, e.g. evidence-based practice, asthma, chronic lung conditions
- Clinical cases (actual patients or case notes), e.g. Mrs X presents ...with
- Clinical or community-based problems, e.g. problem-based learning, a child with a wheeze
- Situations, e.g. critical incident or significant event analysis
- Tasks or skills, e.g. X-ray meetings, clinical audit, examination of cardiovascular system.

Planning and preparation

Small group teaching provides opportunities for in-depth discussion, reflection and consolidation of learning. Planning can be enhanced by thinking about both 'teacher' and 'learner' activity. For example, a lesson plan may be very detailed or a simple outline, identifying key aims and outcomes, structure and timing of activities to enhance learning, content and key topics and learning resources (McKimm and Swanwick, 2009).

Jacques defines three steps (Figure 2) in planning the structure of a small discussion group.

Practical arrangements

The physical environment is particularly important in small group work. Paying attention to basic physiological needs such as comfort, noise levels, and lighting can

help foster a positive learning environment (Maslow, 1943). The layout of the room clearly signals expectations about the ways in which learners should interact with the teacher and each other. Figure 3 shows examples of room layouts for different activities.

For larger groups, tables can be set out in 'cafeteria' or 'cabaret' style, each seating five or six people, with the teacher and equipment at the front of the room. This enables participants to talk and work in small groups and move around easily. The facilitator can circulate when the groups are working.

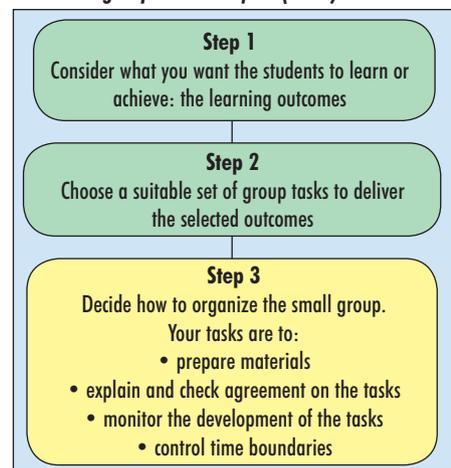
Starting the session

Teachers need to establish an appropriate micro-culture within the group, including the physical environment, the psychological climate, the interactions between the teacher and the groups and between the individual group members. The main task for the teacher at the start of the session is to facilitate forming and norming through:

- Creating a positive and welcoming learning environment
- Outlining expectations and exploring group learning needs
- Negotiating and setting ground rules
- Identifying, agreeing and assigning roles and responsibilities
- Facilitating participation and enabling communication through setting appropriate tasks.

Use people's names, plan for introductions and set out the room to facilitate learning and your planned activities. 'Ice-breaker' activities can provide a fun, non-threaten-

Figure 2. Planning the structure of a small discussion group. From Jacques (2003).



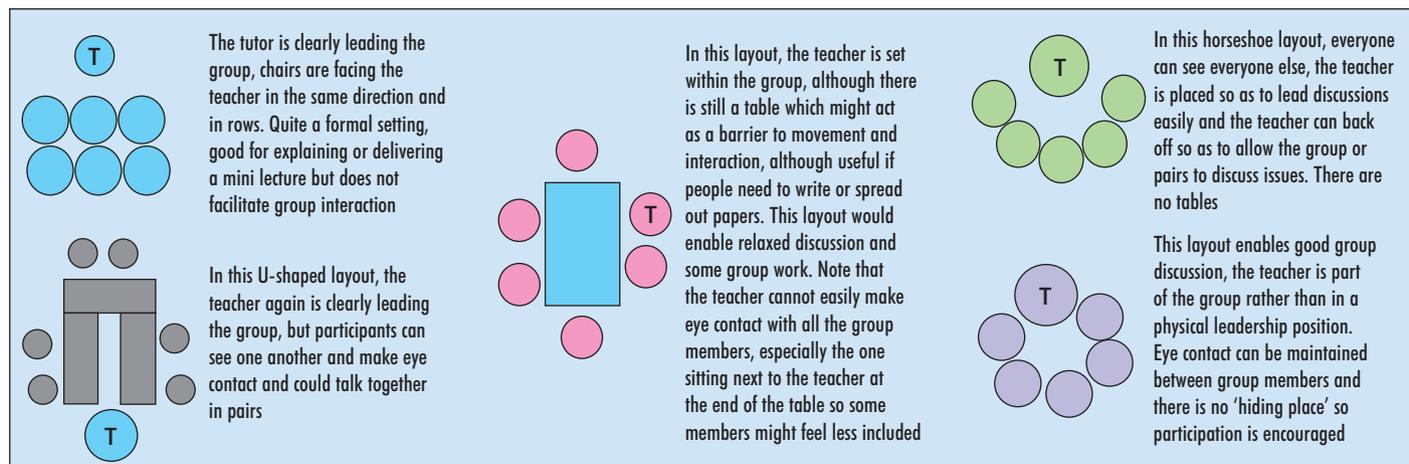


Figure 3. Setting out the room. T = teacher.

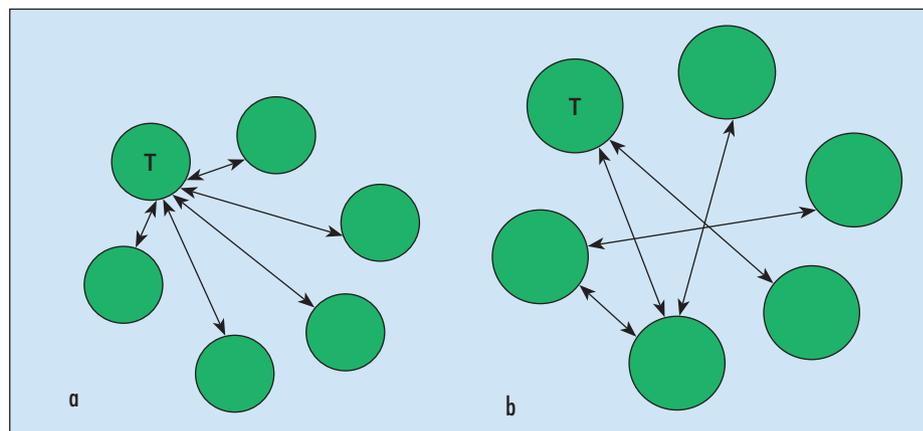
ing start to group sessions. It usually helps to establish ground rules such as starting and finishing on time, not interrupting, participating, saying when you don't understand, switching off mobile phones, treating others' contributions with respect and maintaining confidentiality.

Teaching strategies

The role of the teacher can be more or less directive with particular activities or session varying from being more teacher- or learner-centred. Strategies that foster interaction between learners include:

- Buzz groups: for quick sharing of ideas then feedback to whole group
- Soap box debates: encouraging learners to adopt a given position on an issue
- Role rehearsal: in triads with an observer to rehearse consultation skills
- Posters: flipcharts and pens can be used to create posters on a key topic

Figure 4. Questioning and facilitation techniques. a. The teacher (T) is in a more didactic role with interactions being between the teacher and individual learners. b. Participation is much more active with interactions between participants as well as the teacher.



■ Task groups: breakout activities to consolidate or develop ideas, e.g. write a patient information leaflet on... Using different types of questioning to shift the learning and participation focus facilitates discussions and promotes interactions (Jacques, 2000) (Figures 4 and 5).

Question strategies

Different question strategies can be used to elicit different responses, stimulate deeper thinking and reflection and promote critical thinking and discussion such as:

Evidence

How do you know that? What evidence is there to support that position?

Clarification

Can you put that another way? Can you give me an example? Can you explain that term?

Explanation

Why might that be the case? How would we know that? Who might be responsible for?

Linking and extending

Is there any connection between what you have just said and what Y said earlier? How does this idea support or challenge what we explored earlier in the session?

Hypothetical

What might happen if? What would be the potential benefits of X?

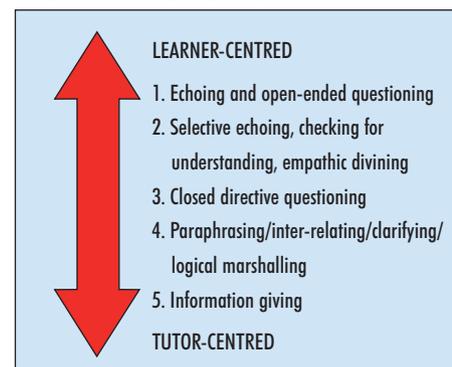
Cause and effect

How is this response related to management? What is or isn't drug X suitable in this condition? What would happen if we increased or decreased X?

Summary and synthesis

What remains unsolved or uncertain? What else do we need to know or do to understand this better or be better prepared? (adapted from Brookfield, 2006).

Figure 5. Learner and tutor-centred learning. Adapted from Jacques (2000).



Handling problems or difficult situations

'If you haven't got problems in your group, then something is wrong.'

(Jacques, 2000)

Jacques (2003) suggests that common problems associated with leading effective small groups include:

- Teachers lecturing rather than conducting a dialogue
- Teachers talking too much
- Students' reluctance to engage in discussion with one another but only responding to the tutor's questions
- Students not preparing
- Individual students dominating or blocking discussion
- Students wanting to be given solutions to problems rather than discuss them.

One strategy is to let the group sort out its own problems which is effective in the long term and worthwhile if a group is to remain together for some time. However, if the group is very new or working together for a very short time (e.g. a workshop) or has a complex and essential task to perform with a short deadline, then tutor intervention will help keep the group task focussed, for example:

- The persistent talker – summarize points and divert the discussion to others, give them specific tasks, break up the group so that the talker cannot monopolise discussions, or be direct and indicate time pressures

- Quiet people – give time to respond, protect from teasing, divide the group into pairs on a task to increase confidence or positively reinforce any contribution
- Negative attitude – these people may like to talk but have a negative attitude that can affect others. Ask for specific examples, invite the group to think of the positive or defuse lengthy debates.

Closing the session

The final task of the facilitator is to close and conclude the session. Here it is important to leave time to wrap up activities and review the learning outcomes, making sure that you also attend to concluding group processes as well as task functions. It is helpful to link the session to the learners' next steps and ensure any follow-up activities are clear.

Conclusions

Small group techniques are useful to encourage learners' engagement with a topic and with other group members. They

can be used in a range of settings from the bedside or clinic to the lecture theatre as well as in more typical classroom settings. The teacher's role as facilitator of learning is a vital component in ensuring effective group working and engagement of all members in task and process. **BJHM**

Conflict of interest: none.

Brookfield S (2006) Discussion as a way of teaching. At: http://stephenbrookfield.com/pdf_files/Discussion_Materials.pdf (accessed 26 February 2008)

Jacques D (2000) The tutors' job. In: Jacques D, ed. *Learning in Groups*. 3rd edn. Kogan Page, London: 155–80

Jacques D (2003) Teaching small groups. In: Cantillon P, Hutchinson L, Wood D, eds. *BMJ ABC of Learning and Teaching in Medicine*. BMJ Publishing Group, London: 19–21

Maslow AH (1943) A theory of human motivation. *Psychol Rev* **50**: 370–96

McCrorie P (2006) *Teaching and leading small groups*. ASME UME series. ASME, Edinburgh

McKimm J, Swanwick T (2009) Setting learning objectives. *Br J Hosp Med* **70**(7): 348–51

Richmond DE (1984) Improving the effectiveness of small-group learning with strategic intervention. *Med Teach* **6**: 138–45

Tuckman BW (1965) Developmental sequence in small groups. *Psychol Bull* **63**: 384–99

KEY POINTS

- Small group techniques can be used in a range of settings.
- Plan the session and activities according to the size of group and venue.
- Include a range of activities to encourage active learning and participation.
- Your role in the group learning process may include group leader, facilitator or observer.
- It is important to pay attention to group dynamics to ensure effective group process as well as achievement of tasks.

London Deanery

This series of articles for clinical teachers was originally commissioned as a suite of e-learning modules for the London Deanery. Both the series and e-learning modules were designed and edited by Judy McKimm and Tim Swanwick.

The London Deanery e-learning modules for clinical teachers are open access and available at www.londondeanery.ac.uk/facultydevelopment

Each module takes 30–60 minutes to complete and proof of completion is available in the form of a printed certificate. Forthcoming articles in this series include:

Facilitating learning in the workplace

Simulation

Interprofessional education

Diversity, equal opportunities and human rights

Curriculum design and development

Teaching clinical skills

Involving patients in clinical teaching

Managing poor performance

Introduction to educational research