

JUST-IN-TIME TEACHING: Planning and facilitating a tutorial

SCOPE: this guide is for you if you want to know how to teach a small group of students in a classroom setting and you have time to plan your teaching. Tutorials come in many guises; the tips in this guide are generalisable and transferable. Tutorials allow a subject to be explored in depth so you should actively involve students and respond to their needs.

TOP TIPS:

Top tip 1: Plan teaching to align with students' needs.

Top tip 2: Select, or create, SMART learning objectives.

Top tip 3: Create a session plan using a 'set-body-close' structure.

Top tip 4: Promote active learning.

Top tip 5: During the set - think 'MMUCKO' (Mood, Motivation, Utility, Content, Knowledge base, Objectives).

Top tip 6: During the body - think 'chunk and check, active learning, key points'.

Top tip 7: During the close - recap, summarise, check learning, revisit objectives, signpost.

Top Tip 1: Plan teaching to align with students' needs.

It is important to plan teaching to align with your students' needs. A good way to do this is to have learning objectives. Learning 'objectives' are a fine-grained version of learning 'outcomes', but we will use these terms interchangeably.

MBChB learning outcomes are in the students' virtual learning environment, (VLE), **Learn**. University of Edinburgh (UoE) employees can access this. Clinicians without UoE status should use the [Medical Licensing Assessment \(MLA\) content map](#) to guide the writing of learning objectives. NHS Lothian's Medical Education Directorate (MED) are creating Undergraduate Educator Guides for medical school placements which will summarise learning objectives: email loth.meducators@nhs.scot to join the MEDucator network and access these guides as they become available.

Top Tip 2: Select, or create, SMART learning objectives.

A learning objective is an outcome statement that captures the knowledge, skills or attitudes a learner should exhibit following instruction. For example: *“By the end of this session, you should be able to ...”*. Learning outcomes are broader than learning objectives and they usually apply to the end of a course, rather than a specific learning event, (eg a tutorial). The principles involved in constructing objectives and outcomes are the same.

Learning objectives should ideally be SMART: specific, measurable, achievable, realistic and time-bound. They will help you decide what to teach and how to teach it and will give your learners a clear picture of what to expect. For example: “By the end of this session, you should be able to: 1. **take** a history of ..., 2. **explain** the importance of ...”.

It helps to choose a good verb! This table gives some examples:

Level of learning (Bloom et al 1956)	Example verbs	Example learning objective
Remembering	identify, name, list, recognise	“list the differential diagnoses of ...”
Understanding	describe, explain, summarise	“describe the reasons for ...”
Applying	apply, choose, carry out	“examine a patient with ...”
Analysing	compare, analyse, categorise	“analyse a set of results for ...”
Evaluating	appraise, choose, interpret	“judge when it is appropriate to ...”
Creating	plan, build, predict, compose	“formulate a management plan for...”

Top Tip 3: Create a session plan using a ‘set-body-close’ structure.

A session plan with a ‘set-body-close’ framework can help structure any teaching you do. Below is an example. Top Tips 5-7 describe the components of the set, body and close.

	What will I do?	How long?	What do I need?
Set			
Body			
Close			

Top Tip 4: Promote active learning.

There is a strong evidence base for active learning (Freeman et al 2014), so students should be actively involved in the learning process, rather than passively receiving information. It is helpful, if possible, is to 'flip the classroom' (Bergmann and Samms 2012; Advance HE 2025). Flipped learning refers to inverting the usual order of events, so students are introduced to the learning material before class, with class time being used to deepen understanding through discussion and problem-solving. You can also prepare open questions in advance, such as "tell me about...". On the day of your teaching, position the chairs and tables so that students can work together easily.

Below are some interactive techniques for use in your set, body or close, (Jaques, 2003):

- **Brainstorms:** these can stimulate creative responses to open questions. Tell students that you will write down all their responses and that you will edit them together later.
- **Buzz groups:** these are 1-3 minute small group discussion activities for use with any group size. Students discuss a topic, (eg a clinical case), often to prepare for a larger discussion. Groups may then be merged to extend the activity, called 'snowballing'.
- **Circular interviewing:** this technique is ideal for groups of up to 10 students. They sit in a circle and each writes down a question. The teacher shuffles these, hands them back out and each student asks another student the question that they have been given.

Top Tip 5: During the set – think 'MMUCKO'.

The set is the beginning of your session and it is very important. The purposes of the set are to create an environment conducive to learning, to capture your students' attention, to motivate them, to get a sense of their learning needs and to orientate them to what they will learn. Typically, in a 60-minute session, the set will take 5-10 minutes.

Think '**MMUCKO**' for the set: mood/motivation, utility, content, knowledge base, objectives. **Mood/motivation:** how will you motivate your students and get them in the mood to learn? Being friendly and learning their names can really help, and sharing your enthusiasm for your subject. Try an 'ice-breaker' activity. **Utility:** how will they know that your teaching is useful? Explain why your session is important, because sometimes it is not as obvious to them as you would think. **Objectives:** what will they be able to do (or do better) by the end of the session? Display your learning objectives. **Content:** what will you do to meet these objectives? Tell them how you will use the time and everyone's role. **Knowledge base:** what do they already know about the subject? You could find out by giving them a quiz or other short activity, (see Top Tip 4 for examples).

Top Tip 6: For the 'body' - think 'chunk and check, active learning, generalisable points'.

The body of the session refers to the main component of it. Typically, in a 60-minute session, this will be 45-50 minutes.

Dividing teaching sessions into smaller chunks can help sustain students' attention. After each chunk, check they have understood things before moving on. It is helpful if each chunk requires them to do slightly different things because when people have a variety of experiences this can enhance learning, (Kolb, 1984). For example, you could intersperse the didactic elements of your tutorial with varied active learning tasks, such as individual thinking tasks, discussions in small groups, or even brief writing tasks.

After each chunk, highlight the key points. You may think they are obvious, but your students probably don't. Tell them how the learning can generalise to other situations.

Top Tip 7: For the 'close' – recap, summarise, check learning, revisit objectives, signpost.

The close is the ending of your session and it is very important. The purposes of the close are to ensure that the students are clear on the key points and to suggest how they can consolidate their learning. Typically, in a 60-minute session, this will be 5-10 minutes.

A good closure recaps the body of the session, summarises the key points again and revisits the learning objectives. It is also important to check students' understanding, for example, you could say, 'Tell me two things that you've learned and one thing that's unclear'. Students should be signposted to opportunities for further learning.

Obtaining written feedback is a good habit to develop. Include questions to ascertain what your students have learned. The [MeFB](#) online platform is a helpful feedback tool.

SUMMARY: When planning a tutorial, establish the students' learning needs, referring to their VLE, (**Learn**), or the [Medical Licensing Assessment \(MLA\) content map](#) as a guide. Choose an appropriate outcome, or write 1-3 achievable learning objectives yourself. Decide how you will help students meet these objectives in your tutorial by using a standard session plan with a 'set-body-close' structure. Ensure that the session includes plenty of opportunities for students to be actively involved. Seek feedback: the [MeFB](#) online platform works well.

WHERE NEXT? This resource has been developed by the [Clinical Educator Programme](#) (CEP) in collaboration with NHS Lothian's Medical Education Directorate (MED). The CEP is a free CPD programme for clinical educators in SE Scotland. For more on the themes discussed in this guide, you may like to register for the CEP Planning and Evaluating Your Teaching course and the CEP Interactive Teaching and Learning course.



REFERENCES:

Advance HE. (2025). <https://www.advance-he.ac.uk/knowledge-hub/flipped-learning-0>

Bergmann, J. and Sams, A. (2012). Flip Your Classroom: reach every student in every class every day. *International Society for Technology in Education* [online].
https://www.rcboe.org/cms/lib/ga01903614/centricity/domain/15451/flip_your_classroom.pdf [Last accessed 5 August 2025].

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W., and Krathwohl, D. (1956). *Taxonomy of Educational Objectives. Volume 1: The Cognitive Domain*. New York: McKay.

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., and Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, 111(23), 8410–8415. <https://doi.org/10.1073/pnas.1319030111>

Jaques, D. (2003). Teaching Small Groups. *British Medical Journal*. 326:492-494.

Kolb, D. (1984). *Experiential Learning as the Science of Learning and Development*. Englewood Cliffs, New Jersey: Prentice Hall.