

Teaching and Learning Methods

Lecture

Lecturing is a common teaching method in medical education and certainly can be an effective way of delivering information. In order to make your lectures most effective, consider adding some of the following teaching strategies:

- **Questions** – Stop your lecture from time to time and ask questions. Give students time to think about and answer your questions before answering them yourself. Prepare questions ahead of time and put them in your lecture notes; don't expect to think up or remember questions on-the-fly. Be sure to acknowledge all responses in a respectful manner in order to encourage engagement and participation in future sessions.
- **Clickers** – Electronic polling systems, or clickers, allow you to ask questions and poll the entire class to see their answers. It is an effective way of engaging the entire class with questions and it allows you to determine if your students understand the material. For more information on clickers go to <http://www.med.mun.ca/HSIMS/Health-Education-Technology-Learning/Classroom-Technologies.aspx> or contact Adam Siscoe.
- **Small groups in lectures** – If there is time during a lecture, consider breaking the class into informal small groups of two or four and have them discuss some aspects of the material and answer questions. This will help reinforce lecture content and the use of clickers would allow you to engage all the groups with questions.

Small Groups

Having the students learn in small groups is one way to increase engagement and mental processing of course material. Ideal group sizes are around six to eight or possibly up to ten, but constraints of space and personnel may make larger groups necessary. Small group learning can be organized in one of two ways:

- Groups may be placed in different small learning rooms. Ideally each group should have its own faculty tutor, but due to constraints, it may be necessary for a single tutor to float between several rooms.
- Groups may sit separate from one another but remain in the lecture theatre. Both 1M101 and 1M102 are able to accommodate this sort of group work, but advance notice is required to moved chairs and tables in 1M102. All groups may then be monitored by one or two faculty tutors who oversee the entire class.

The activities of the small groups can also be different, depending on what is needed:

- **Tutorial** – The group session takes place after a lecture and the groups work through one or more activities which allow for the processing of course material. Activities usually include clinical cases, scenarios or problems, with specific questions to be discussed. Some new material may be introduced as well as reinforcement of previous content. If there are multiple tutors, then it is crucial all tutors understand the material and agree on a common approach to the content. This can be accomplished by having tutors meet before the tutorial session. Individual variation is to be expected, but it is important to provide students with content that adequately covers their curriculum objectives. It is also suggested that students be provided with a summary page and/or study guide after the tutorial session, to ensure that they have learned the most important material.
- **Flipped classroom** – The group session takes place after the students have first learned the material on their own, by means of online resources such as a recorded lecture or narrated PowerPoint slideshow, and then come to class to discuss the course material. This type of session will be very similar to the tutorial type with clinical cases or scenarios and questions, differing mainly in that it does not follow a lecture. It will be necessary to consider the amount of time needed by students to learn the material online before coming to the group session so that they are not overburdened. We cannot expect to “flip” every lecture and still maintain a reasonable workload for students, but revising some lectures in this manner would be a good approach. It is also a good idea to provide a brief overview to start the group session, in case some students have missed the most important points. It is recommended that this type of group session be done with all students in the same lecture theatre so that the primary faculty member can monitor the students’ progress.
- **Small groups as primary learning method** – The group session is where the students first become exposed to a content topic, rather than to reinforce previously learned material. This type of learning is difficult to design, requiring a careful structure of problems, questions and content to stimulate engagement and learning, while not frustrating students who often want to be “taught” first, then “apply” later. It is recommended that this type of group session be done with all students in the same lecture theatre, and that a great deal of planning go into the design of such a session.

For more information on running small group tutorials, flipped classroom, or small group teaching design, contact [David Stokes](#) or [Steve Shorlin](#).

ELearning Modules

Independent learning modules, or ELearning modules, are a way of presenting course content online so that students can learn it at their own pace instead of in a classroom setting. Slots are provided to students in the schedule to complete ELearning modules, but they can be done by students at any time. Modules are often created using existing PowerPoint lectures as a starting point, with the addition of narration and questions built in to the module. Questions can be completed by students as part of the module, with feedback given on correct and incorrect answers, and possible references to module content where appropriate. For more information, contact [David Stokes](#).