

TUSM Curriculum Committee
Teaching and Learning Policies Subcommittee

Guidelines for Effective Lectures at TUSM
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There are many articles discussing various modes of medical education, including lectures. The intention of this document is to provide TUSM lecturers some insight into what *our* students have found to be features of the most useful and inspiring lectures they have attended.

We encourage all lecturers to read “In Defense of the Lecture,” a short article published in *Resonance* (a journal of science education) by Elio Schaechter, former Chair of the Tufts Molecular Microbiology Department and now Distinguished Professor Emeritus.

Lecture Content

1. If the lecturer is speaking to a TUSM class for the first time, the students appreciate having an introduction (by either the course director or the lecturer) that takes a minute to give the lecturer’s background, specialty, and interests.
2. A lecture should begin with a discussion of 3-5 learning objectives that will form the basis of the subsequent assessment.
3. The lecture should avoid presenting numerous details that are destined for short-term memorization. The focus should be on developing understanding and creating connections within the discipline and medicine as a whole.
4. The lecture plan should focus on providing the fundamentals, clinical relevance, and a framework for understanding and organizing “facts.” The lecturer should not feel obligated to cover everything in the syllabus. The goal is to transform information into knowledge.
5. A “50 minute lecture” should be designed to fit 45 minutes.
6. A 50 minute lecture should contain no more than 45 slides, generally fewer.
7. Patient cases should be used to highlight important concepts and show clinical significance. Even for first and second-year students, clinical correlates help place concepts in a clinical perspective so students can appreciate the relevance of the material. Clinical relevance should be included without using excessive lecture time describing a detailed clinical case.
8. The end of the lecture should include a review of key ideas and a summary of the learning points.

Lecturer Style

1. Be INTERACTIVE! There are various ways to engage your students, including:
 - a. Ask questions, or a series of questions (rhetorical, show of hands, or call on an individual student)
 - b. Feel free to walk up aisles to engage students
 - c. Eye contact with members of your audience
 - d. Use provocative statements
 - e. Make use of personal experience
 - f. Use humor. A relaxed lecturer utilizing some humor will help students remain focused and ask questions.
 - g. Outline a problem and possible solutions to tap into the students' scientific/clinical curiosity.
2. Show enthusiasm and passion for the material! Students will not be excited about the material if the lecturer is not.
3. Avoid overuse of PowerPoint. Some of the best lecturers at TUSM use chalk.
4. Determine the right pace. Find a happy medium between putting students to sleep and "flying through" material so quickly that students give-up listening.

Lecture/Syllabus symbiosis

1. Keep to the lecture goals that are outlined in the syllabus
2. Have the important charts / pictures presented in lecture included in the syllabus. These figures can be embedded within the text or isolated, but the syllabus should include sufficient explanatory text for these key figures.
3. Within a course, it is helpful to have a consistent format in which material is presented--even if it's just in the way the syllabus is written/ printed.
4. The lecture presentation and the syllabus section should correspond as much as possible - topic by topic, not word for word! The syllabus should NOT be the printed PowerPoint slides OR a simple outline ... but should include concise text written by the lecturer discussing the topic and point.

Lecture Tips from TUSM Students

1. Consider starting off with a case that is returned to and discussed at the end.
2. Speak clearly and project your voice! A potentially great lecture is wasted if parts are inaudible.
3. Indicate how the material fits into the overall course and impacts the material already covered or will be covered.
4. Make sure you are aware of the level of your audience
5. Try to gauge whether your audience understands important points. Be prepared to explain concepts in multiple ways, even if it means breaking away from your PowerPoint presentation.
6. Make sure the multimedia components work beforehand (including videos, links, sounds, etc)
7. Avoid complex and “busy” PowerPoint slides. Keep slides simple and limit the amount of text! A good slide can go a long way.
8. Never simply read off the lecture slides (then no one is inclined to come to class)
9. Avoid spending so much time on the first few slides that last 30 minutes is rushed to finish on time (practice and/or use a timer). Although this sounds obvious, it occurs everyday.

Suggested Reading

Schaechter, M. “In Defense of the Lecture” *Resonance* (2008).

Brown, G. and Manogue, M. AMEE Medical Education Guide No. 22: Refreshing lecturing: a guide for lecturers *Medical Teacher* 23: 231-244 (2001).

<http://www.informaworld.com/smpp/content?content=10.1080/01421590120043000>