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Lecturing

By Associate Professor Craig McInnis

There is no one way of giving effective lectures, and there is no simple formula for transforming poor lectures into quality learning experiences. Most lecturing can, however, be significantly improved by attending to some critical elements after careful evaluation and reflection. Ultimately, the criterion for judging effectiveness is not the performance but the outcome; and the outcome that counts is the student learning that occurs.

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Because they are economical, and generally effective, lectures form the core of most higher education teaching programmes. Lectures are at their best when they stimulate students to become active learners in their own right. A close study of 'gifted' lecturers stressed the importance of "caring for students, love of subject, preparing properly, and conveying principles rather than details" (Sheffield, 1974). Good lectures are well organised, and presented clearly and enthusiastically. Lectures are a problem when they are the only teaching method used and when the students are encouraged to be passive.

The effectiveness of lectures versus other methods of teaching has been researched for many years. The results are not compelling one way or the other and, in any case, judgements of effectiveness largely turn on the goals of the teaching one has in mind. Lecturing is about as effective at delivering information as other methods although, as McKeachie (1978) points out, "if rate of transmission is important, a good book is hard to beat." And if recall is the goal, reading does better. However, "... a first-rate lecture is better than written material at emphasizing conceptual organization, clarifying ticklish issues, reiterating critical points, and inspiring students to appreciate the importance of key information" (Lowman, 1988).

As Edward Gibbon pointed out long ago:

There still remains a material difference between a book and a professor; the hour of the lecture enforces attendance; attention is fixed by the presence, the voice, and the occasional questions of the teacher; the most idle will carry something away; and the more diligent will compare the instructions, which they have heard in the school, with the volumes, which they peruse in their chamber.



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The advice of a skilful professor will adapt a course of reading to every mind and every situation... (Memoirs from Oxford, 1788).

It is generally agreed that student-centred discussions in small groups are better than lectures for developing problem-solving skills, encouraging independent learning, changing attitudes, and motivating further learning. Nevertheless, it is possible, with imaginative teaching, that these outcomes can to some extent be achieved in lectures. If lecturers are enthusiastic and aim to engage the learners, they can, for instance, motivate students to want to know things they otherwise might not have explored.

Overall, effective teaching is systematic, stimulating, and caring (Brown and Atkins, 1988). Being systematic in lectures requires a considerable amount of thoughtful planning, not just about the content but about ways of engaging students. Stimulating lectures are usually the product of imaginative structuring and a desire to challenge – not to be confused with entertaining – students. By 'caring', I mean showing a genuine desire to share a love of the subject with students. One way of doing this is to put effort into the quality of the lecture content and organisation.

What is a good lecture?

Lecturers and students have different criteria for evaluating lectures. Improving lectures is not about pleasing students by giving them what they want, but addressing their most common complaints ought to be a good start. In a recent, UK study of student's perceptions of quality in teaching and learning, the most important issues had to do with lecturers' personal qualities. Students rated lecturers' enthusiasm, interest, and charisma most highly, along with clear handouts and good presentation skills.

In other studies, students have commonly criticised lecturers for:

- inaudibility,
- incoherence,
- pitching material at the wrong level,
- not emphasizing the key points, and
- poor chalkboard/whiteboard/overheads.

On the other hand, lecturers criticise lecturers for:



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- saying too much too quickly,
- assuming too much knowledge,
- forgetting to provide summaries,
- not indicating the difference between main points and asides, and
- poor timing of the length of the lecture (Brown and Atkins, 1988).

Attending to all these criticisms would be a good starting point towards improving lectures. The very first step, however, is to be clear about the purpose of the lecture. Depending on how well they are organised and presented, lectures are useful for:

- Covering the content of the course at the level of principles, and setting a framework for dealing with material from texts, laboratory work and small group discussions. Lectures should not be the main or sole vehicle for conveying information in a course.
- Facilitating student understanding of the material by careful explanation related to the experiences students bring with them, and by creating opportunities for student activity.
- Motivating students to be curious about the subject, primarily by virtue of the lecturer's enthusiasm and the intellectual challenge provided.
- Anchoring the course by providing links to tutorials, lab sessions, assignments and reading.

The most basic advice usually given by experienced academics to colleagues new to lecturing is mainly about **clarity** :

- speak clearly, use pauses, don't go too fast;
- structure the lecture to give a clear, simple (not simplistic) view of a topic;
- clarify key points;
- observe student reactions;
- don't try to cover everything;
- ensure you understand your own material; and
- show your enthusiasm for the subject (Brown and Atkins, 1988).

All lecturers can benefit by considering the points below. These are largely adapted from Eble's classic work *The Craft of Teaching* (1976). It is worth noting that Eble's chapter on lecturing is titled, *The lecture as discourse* , since, as he points out, "the best general advice



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to the teacher who would lecture well is still **Don't lecture**. That is, for most of teaching, to think in terms of discourse – talk, conversation – rather than lecture."

In addition:

1. **Fit the material to the time at your disposal.** Restrict yourself to a few key topics. Most students can only absorb three or four main points in fifty minutes, regardless of the subject being taught (Lowman, 1988). The most common mistake of beginning lecturers is to include too much material. This causes them to rush and deliver the material badly, which is a waste of everyone's time. Students frequently complain about the pace and timing of lectures.
2. **Spend time finding examples and illustrations, and other ways of breaking up a single presentation mode.** The time invested will be worth it. Try the examples out on colleagues or students in small groups to ensure that they 'work'.
3. **Plan the beginning carefully.** Initially, focus on:
 - stimulating the interest of the audience to gain their attention,
 - establishing a relationship with the group, and
 - outlining the content and structure of the lecture.
4. **Develop an ability to improvise.** Try to sustain an improvisational quality even in a carefully structured presentation. Plan for shifts of pace and asides, and work to make them look 'natural' rather than mechanical. Try to relax and be yourself.
5. **Provide the audience with frequent breathing spaces.** Provide opportunities for questions, problem solving exercises, short, sharp group discussions and other activities.
6. **Provide an ending for every lecture.** You should spend almost as much time planning the conclusion as you do planning the opening of the lecture. Most lectures are overloaded with information.

It is preferable to ditch something as you go, rather than giving a rushed and garbled conclusion. If you are anxious about your timing, earmark an expendable section of the lecture with a reminder note such as, 'if time'. In the last ten minutes or so, the



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attention level of students is relatively high and this is the right time to consolidate the key concepts and principles you are aiming to get across. A clear, well-rounded ending leaves students in a positive frame of mind about the lecture and the material. Ideally, it should let them know what they have learned in the lecture and stimulate them to want to know more. Ensure that you make links to the next session.

7. Develop and use a range of voice, gestures, and physical movement. One of the strongest factors influencing student ratings of lectures is the way you talk. Again, enthusiasm is one of the most important elements in outstanding lecturing - but only if it is genuine. Listen to yourself. Get some feedback from friends and colleagues to reduce distracting mannerisms and affectations. Students should not have to strain to hear you, nor should they be able to make bets on the number of times you repeat pet words.

8. Be guided by the living audience. Keep your eyes on the audience and your mind on the content. Pause occasionally to assess the impact you are making. Ask questions: "Can you see that clearly?" Watch for signs of confusion and puzzlement and respond to them directly: "I can see some people are puzzled by that. Let me just emphasize the main point ..."

Students sometimes find it difficult to discriminate between central issues, examples and asides. It is important to make explicit the shifts in levels of explanation in lectures. Providing structural cues to students improves ratings of clarity and the quality of note-taking (Brown and Atkins, 1988). The standard advice for presentations has always been, "Tell them what you are going to tell them. Tell them. Tell them what you have told them."

More specifically, you need to indicate to students when you are:

- outlining the direction of the lecture ("Today I want to examine four aspects of ..."),
- beginning and ending a topic ("Let's look now at ..."),
- emphasizing key points ("The basic principle to be remembered here is ..."), and
- linking the sections of the lecture and to previous knowledge ("Remember how I ...").

These signposts or cues do not need to be labored or reduced to kindergarten level. Providing verbal cues is something that good communicators do frequently, without making the presentation appear too formal.



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Characteristics of a bad lecture

Most of the faults identified by Eble – and there are many more – are glaringly obvious, but we all fall into old traps occasionally. It often takes some feedback from others to point out basic faults:

- lack of introduction to the subject or the speaker's style, attitudes, or objectives;
- lack of contact with the audience;
- fixed posture with attention fixed on notes;
- excessive qualifications of terms;
- no references to the present context or broader subjects;
- failure to respect the audience's knowledge or interests;
- displays of false modesty about the lecturer's self and subject;
- preoccupation with historical background to neglect of the subject at hand; and
- little sense of time passing.

Engaging students as active learners

The strategies listed below can be combined in a number of ways and, in the final analysis, depend on your imaginative planning and your personal style. The key question that motivates lecturers who challenge, inspire and enthuse students is, "How can I engage students in the process of teaching and learning?" The goal is to create conditions that make students active learners.

Breaking up the lecture into segments may assist in maintaining attention but that does not necessarily make students active participants. There are some dangers here. Lectures can become fragmented, and it may generate confusion, irritation and distraction from the main goals of the lecture. Busy work also runs the risk of trivialising the lecture, so make sure the activities are worthwhile and challenging.

In planning to engage students, try some of the following:

- Start with what the students know.
- Make a point of showing your own interest and commitment to the topic.



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- Plan to use examples, analogies, metaphors and models.
- Provide several examples of unfamiliar material.
- Use a mixture of modes of explanation.
- Play on the intellectual curiosity of the audience with puzzles, problems and questions.
- Get the students to provide summary points in groups and compare them with yours on an overhead transparency.
- Provide students with 'fill in the gap' handouts. Get them to guess at the labels on models and diagrams.
- Divide students into 'buzz' groups of three or so to solve problems, suggest examples or raise questions.
Keep these activities focussed.
- When using video clips give clear directions for focussed viewing. For example: ask questions of buzz groups; use role play; get students to take the part of actors, demonstrators and so on; freeze the video and get students to suggest what happens next.
- Give an occasional quick quiz of multiple-choice questions on an overhead.

(For many more suggestions, see Gibbs, Habeshaw & Habeshaw, 1985; Brown and Atkins, 1988.)

Handouts and audiovisual aids

The effectiveness of handouts and audiovisual aids depends on the quality of the aids as well as on why and how they are used. The point of introducing slides, video or other media is not to entertain or merely to break up a verbal presentation, but to enhance learning. They should focus attention on aspects of the material, improve the clarity of explanation, and provide strong visual reinforcement of concepts. It is not enough to show a diagram or video and assume that the meaning is self-evident. Students should be directed to look for particular things relevant to the topic. Posing questions before the presentation and providing an opportunity for student response immediately after can be most effective.

Handouts concern a lot of lecturers. Some find it difficult to strike a balance in terms of the amount of information they provide to students. If handouts are too long and detailed it is difficult to see why students should bother attending lectures in the first place. Lengthy handouts given before a lecture tend to distract students and can become a source of



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irritation for the lecturer. If lecture guides are used, they should provide a concise outline only, perhaps with some key terms defined and key references. In some circumstances it may be appropriate to give the handout after the lecture.

Evaluation for improvement

There is always room for improving the quality of lecturing, no matter how good you are or how long you have been at it. Even if you have carefully noted and acted on the points of advice given above, you may still feel unhappy about your lectures. I suggest that you consider soliciting the help of a 'critical friend', preferably a colleague whom you judge to be a very good lecturer. If that is not possible, or if you feel uncomfortable about it, a member of the staff development team can help. The critical friend should work through your lecture notes with you, help analyse student evaluations and student performance on assessed tasks, and preferably attend some of your lectures.

Evaluating lectures is not as simple as getting student feedback. The effectiveness of the lecture may partly be judged on student perceptions of the presentation or on how much students remember, but it may be just as important to consider how many students were motivated to borrow a book on the subject or perhaps chose to pursue further study of the area. In other words, the real test of the worth of a lecture is the extent to which students were challenged and excited by the lecturer's belief in the importance of the subject.



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Further reading

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