53 Powerful Ideas All Teachers Should Know About

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Lectures are used far too often

Teachers in Higher Education are, in many countries, called 'lecturers' (while school teachers are nor called lecturers). Classrooms designed for lectures dominate buildings on most university campuses. Course documentation often lists the lectures as a way of explaining both the content and process of the course. Lectures are at the centre of what higher education does to educate students.

When metal plate printing first developed in the mid fifteenth century, a number of contemporary observers thought that this was the end of the lecture, that it no longer made sense to stand up in public and read out your notes if anyone could read the original text for themselves. Fast forward four hundred years to the expansion of universities towards a mass higher education system in the UK in the 1960's and these 15th century observers would have found, to their astonishment, wall to wall lectures in almost every institution. There are universities with institution-wide pedagogies that do not rely on lectures, in the Netherlands, Denmark, Germany... but not in the UK (except for the Open University, which, incidentally, has the best National Student Survey scores).

By the 1970's Donald Bligh had written one of the first comprehensive reviews of the research evidence about teaching in higher education, entitled 'What's the use of lectures?' - and it was comprehensively damning. There are pedagogic systems, such as the 'Keller Plan' and 'Supplemental Instruction', which have been found, by every study of their comparative effectiveness, to work better than conventional alternatives. For lecturing the reverse is the case. Over 700 studies confirmed that lectures are less effective than a very wide range of other methods for achieving almost every educational goal you can think of. Even for the 'transmission of factual information' they are no more effective than a host of other methods, including private reading. They inspire students less than other methods, and lead to less study afterwards. For some educational goals no alternative has ever been discovered that is less effective than lecturing, including, in some studies, no teaching at all. Studies of the quality of student attention during lectures, of the accuracy and comprehensiveness of student notes taken during lectures, and the level of students' intellectual engagement during lectures, all point to the inescapable conclusion that lectures are not a rational choice of teaching method in most circumstances.

I have had the pleasure of experiencing lecturers who I remember vividly - though I remember what they said less clearly. There are certainly teachers who are capable of 'bucking the trend' and achieving better

results than the research evidence suggests - but also, of course, others whose effectiveness is even worse than the averaged data in published findings. Citing one-off examples of allegedly effective lecturing should not cast doubt on the overall findings.

Is this evidence true for all types of lectures? Well Donald Bligh, and the research he summarised, had a fairly narrow conception of the range of things that lectures are sometimes used for: primarily uninterrupted presentation for nearly an hour, whose job it is to provide students with the content of the course. However lectures can perform some quite distinctive roles. For example in some disciplines lectures perform the role of demonstrating the use of the discourse of the discipline: the way legal arguments are constructed, how literature is critiqued, and so on. The message is "One day you will be able to talk about this subject like me". Students may not be expected to pay attention to details of the content of the lecture, but to its process. The lecturer is 'modelling'. Research into lecturing has not addressed this issue well though conventional wisdom about how students learn to use disciplinary discourse emphasises their active engagement rather than their passive observation. Some other varieties of lectures used for distinctive purposes are also poorly researched.

Another limitation of studies of lecturing is that they usually consider lectures in isolation, and compare them with other methods, also in isolation – for example is one hour of lecturing more or less effective than one hour of discussion? In practice however lectures are nearly always one component of a pedagogic system that includes study, assignments, exams, other classes, and so on. Lectures can provide a conceptual frame for such a system, pace students through it, identify what needs to be studied, provide a social context for otherwise solitary studying, and so on. It is much harder to research the way lectures fulfil multiple and subtle roles in complex pedagogic patterns. However what we know about the alarmingly low levels of student effort in UK higher education is that current lecture-based pedagogic systems are, overall, not doing very well at supporting student learning outside the lecture.

It may be argued that lectures are used not because they are believed to be effective, but because they are cost-effective: they are so cheap that it doesn't matter if they are a bit less effective than unaffordable alternatives. And they are certainly cheap, and beyond a certain point you can keep scaling up the size, and lowering the cost, of lectures, without making much difference to how effective they are. This is in part because they are so ineffective even when undertaken in small classes that there is a floor effect – they cannot get much worse as class sizes increase. However as learning gains are predicted by study hours, but not by class hours, the argument that lectures are cost-effective would hold up only if lectures were good at increasing study hours, and they are not. Indeed the more lectures there are, the fewer learning hours each generates. There are alternatives that have a much better record of

generating learning hours, and some cost nothing, though students might not like them as they require more effort.

In recent decades there have been developments in technologies that have made it ever easier, and cheaper, to capture lectures digitally for students to view at their leisure, at home or even on the move. This provides flexibility of timetabling, allows students to view at their own pace, stop and reflect, go back and repeat and so on. Most MOOCS rely heavily on such lectures, often by academic 'stars' and well above average lecturers. The Open University used to broadcast lectures via terrestrial TV channels such as BBC2, for students at home to video-record. The OU was initially known as 'The University of the Air' for this reason. However they have largely stopped doing this, even for distribution on line or on CDROMs, because they have evidence that it is not cost-effective, and today recorded lectures are a much smaller part of OU course delivery than they used to be. The Open University's version of MOOCS is not as reliant on lectures as are most other versions.

Not all 'lectures' involve 50 minutes of uninterrupted presentation. Student attention can be maintained, and the level of intellectual engagement increased, by breaking lectures up and introducing brief active interludes.

Lectures can include quizzes and interaction, and some teachers turn 'lecture' slots on the timetable into large class workshops. 'Lectures' can be used to brief and de-brief active learning that takes place out of class, rather than assuming such study will happen automatically as the consequence of presentations. The Epigeum on-line training materials on lecturing demonstrate not just how to lecture, but how to do other things during lectures that ameliorate their inherent weaknesses. The term 'lecture' is often a misnomer for what actually goes on and the evidence Donald Bligh reported may well not apply to 'lectures' that are not primarily didactic.

This '53' item has been developed from an article by Graham Gibbs published by Times Higher Education, and their permission to use text from that article is gratefully acknowledged.

Suggested reading

Donald Bligh (2000) What's the Use of Lectures? London: Jossey-Bass

Chapters 1 and 3 (the crucial chapters) can be found at: http://isites.harvard.edu/fs/docs/icb.topic38998.files/Bligh_Ch1_and_Ch3.pdf

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