

## **Editorial**

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### **Educational technology and the traditional lecture**

I was recently invited to give a lecture at the opening of a new high-technology lecture theatre at Leeds Metropolitan University. It is one of the best examples of its kind I have seen. Its impressive features include hi-fi surround sound, an enormous back-projected screen giving superb picture quality from either a VCR or directly from a computer for live demonstrations, online facilities, the latest remote-control slide-projection equipment, complete lecturer's control panel, and several nice touches such as automatic dimming of the auditorium lights when Play is pressed on any of the hidden video playback machines. The overhead projectors and their screens are of the best quality and correctly positioned for the clearest possible display. There are also video-link facilities for spill-over into a secondary lecture theatre which itself is well fitted out in presentational equipment.

Clearly, this set-up involved major expenditure. It was therefore presumably discussed at great length before the decision concerning such a long-term commitment was taken. But a commitment to what? To the use of technology in education, obviously, but also to the notion of the stand-up-and-deliver lecture. Typically, computer-assisted instruction involves a single student or small group of students sitting in front of a monitor, interacting with some software and self-pacing their learning. The traditional lecture represents the very opposite of this approach: large numbers of students taking notes, with interaction being at best limited and at worst non-existent, and with the pace of proceedings depending almost entirely on the lecturer's judgement.

Now, I am involved in a shared final-year course in my own university which attracts large numbers of students and for which the traditional weekly lecture is the main communication medium, and I have just attended a staff-student committee meeting at which some criticism of this course was voiced by students taking it. It was not that these students complained of the course being taught in a less than innovative way, but rather that they were being asked to do too much on their own outside class hours, in particular studying secondary topics which cannot be covered in only 25 or so lectures plus some tutorials. In my long experience, university lecturers have always grumbled that students wish to be spoon-fed. But even taking into account any rose-coloured view of the past I may have, I would say that the situation has, if anything, worsened over the past decade or so.

These days, we might tend to put the problem - accepting that for some teachers in some disciplines, it may not actually be a problem - in terms of students preferring passivity to interactivity, or at least we might extend the problem to those terms. For this reason, I am a little sceptical - when it comes to the practice - about the claimed benefits of courses offering the possibility of experiential and discovery-based learning in higher education. It almost goes without saying that the intentions are good, but the practice, if it is not precisely the streets of Hell, is paved with obstacles, not the least of which is a widespread desire among university students to have files full of lecture notes. Having lots of neatly filed-away information appears to be satisfying in itself, such that learning can be postponed with a clear conscience until the time comes for revision. And this is true not only in subject-areas where large amounts of factual information have to be delivered. For instance, it is equally true of translation courses in modern languages, where fair copies of translations may be given out by a teacher, to be filed away by the students for future reference, whatever that teacher's

exhortations that such fair copies should form the basis of a regular review of errors, in the students' own time, so that learning is continually maximised. It is equally true of certain science, social-science and philosophical disciplines where the understanding of concepts outweighs factual knowledge, and where notes about a lecturer's view of a multi-sided problem may not be thought about but rather, simply, filed for later consideration as the examination approaches.

All this, of course, is part of the traditional criticism of the traditional lecture, but the advent of usable educational technology has made the issue even more poignant. Not all educational technology is in a primitive stage of development. We have with us, here and now, many tools which allow genuine self-paced exploratory learning at a high level, without those almost insurmountable barriers of a computer program crashing, or occasionally being made to look inadequate (or plain stupid). Why, then, does educational technology have to be promoted so vigorously by those who believe in its advantages? Indeed, why does ALT need to exist? Why not simply an association for learning? After all, there exists no association, as far as I am aware, for the promotion of good practice in word-processing, or sending faxes, or using the telephone.

Two answers to such questions are often given. The first is that educational technology involves considerable financial investment, so that those who decide on how much to spend on what, need to be convinced of its cost-effectiveness. The second is that many students are technophobes. As to the former - the question of cost - it is plainly true that decision-makers within higher education have to be persuaded that educational technology involves a worthwhile return, both financial and pedagogical. But that argument, taken on its own, can be easily won, and once it has been won, what seemed at first impossible in terms of commitment to spending - even in times of cash shortage - can actually be achieved. There is also clearly some truth in the existence of student technophobia, but again this can be overcome, and is being overcome in many disciplines in many institutions.

No, in my view, the most fundamental obstacle to the acceptance of student-centred learning, with or without the use of technology, is student attitudes to university courses. I would not claim that this is true in all subject-areas in all universities, but I have my own experience to draw on, as well as that of colleagues both in my own institution and many other institutions. The experience of many teachers who have tried educational software is that student reaction is favourable - indeed, we have seen that direction clearly emerging in certain contributions to this journal. This must give us cause for optimism. There remains nevertheless the ominous presence of the satisfying, if dusty, file of lecture notes. In a word, somehow we have to change student attitudes to learning, and that is the major challenge, a far greater one than changing the attitudes of students and financial decision-makers to technology.

If we succeed in changing such attitudes to learning, what of the traditional lecture? It seems to me that Leeds Metropolitan University will have got it right on this score provided that the new lecture facilities are accompanied by other technological facilities for small-group learning. But, whatever other facilities are available, the high-technology lecture theatre will in any event have its rightful place. If used well - and really good facilities tend to generate their own use (while poor, or even merely adequate, facilities result in technological hardware gathering dust) - it allows for brighter lectures. And since the real purpose of a lecture is to stimulate thought and further study rather than being merely a method of communicating information, having the technological means of making a lecture more interesting, and hence more thought-provoking, can only enhance the learning process.

*Gabriel Jacobs*