

Telling or teaching: towards a new lecturing paradigm

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Tell me and I forget. Show me and I remember. Involve me and I understand.

Chinese Proverb

The digital age is producing a revolution in education, yet for many practitioners the concept of lecturing has remained unchanged, underpinned by a belief that the teaching and learning process is simply a transfer of knowledge (Fox 1983). This empty vessel theory of learning (ibid) has the lecturer delivering a prepared talk on a set area of subject matter, with key points illustrated via board notes, overheads or powerpoint presentation, whilst the students listen, take notes and occasionally are given the opportunity to question or respond. At its worst one suspects that:

The information passes from the notes of the instructor to the notes of the student
without passing through the minds of either one.

(Johnson, Johnson & Smith 1991: 9)

Power rests with the lecturer and the learner is a passive recipient. Little wonder then that colloquial use of the term lecturing equates it with being given a reprimand by a superior, forced to listen as your inadequacies are made clear. Anecdotal evidence from university academics suggests that when lecturing fails to engage students, the attendance rates can be less than 50%, so how do we move from telling to teaching?

Some have attempted to challenge this traditional model of lecturing with a prescriptive approach, viewing lecturing as a set of skills that can be mastered, an approach demonstrated by titles such as *53 Interesting Things to Do in Your Lectures* (Gibbs, Habeshaw & Habeshaw 1985) or *500 Tips for Tutors* (Race & Brown 1994), or by the more open-ended format of recent works (Murphy 1998). There is also the competency approach taken by Ashcroft & Foreman-Peck (1994) where lecturing is seen as a set of competencies that can be broken down into discrete elements. Given that few academics have any teaching qualification (as opposed to professional qualifications) there is a role for these teaching handbooks to play but they are no substitute for informed, reflective practice.

Marton and Saljo's seminal work (1976) on deep and surface learning is of key importance here. A surface approach to learning is characterised by dependence on the teacher, a lack of engagement, and facts memorised rather than meaning established and relationships observed. In contrast the deep approach implies students involved in the learning task and seeking to obtain underlying meanings. It means:

*Trying to make sense by relating parts of the material to the whole, using
previous experience and knowledge.....and taking a vigorous and*

active approach to learning the content.

(Ramsden 1993:40)

Tasks are seen in context. This deep approach to learning is frequently cited as a goal in tertiary education, but rhetoric and reality do not often match (Gow & Kember 1990). Lecturing's shortcomings are frequently cited and online teaching hailed as the dawn of a new era in education, but what is really happening in lectures and how can information technology enhance teaching effectiveness? On the information superhighway is there still a role for lecturing, and if so, what form should it take?

In an attempt to explore these issues, structured interviews, approximately an hour in length, were conducted with ten RMIT university lecturers recognised as being successful practitioners. They were selected on the basis of a correlation between peer and student nomination (interestingly enough three of them were later found to have won university teaching awards) and with the aim of maximising the range of disciplines covered and incorporating both undergraduate and post graduate teaching. In age they ranged from 29 - 53; four were male and 6 female; they lectured in economics, research methodology, curriculum, mathematics, medical microbiology, literacy, music, communications, engineering and biological anthropology, to groups ranging in size from 15 - 400.

When asked to describe what lecturing meant to them responses revealed a clear division. Most used terms such as enabling and facilitating and spoke of interesting students and inspiring them to engage in self-directed learning. There was a clear sense that lectures could be the starting point for a journey into learning, a part of a total educational package. Several rejected the term as being irrelevant to their teaching philosophy and claimed that they didn't lecture, associating the term with ineffective teaching, with a hierarchical transmission model now clearly outdated.

In preparing a lecture there was no shared pattern, but some common themes emerged. One was to identify the key concepts or theory to be introduced, and to then build around those concepts examples, illustrations, audio-visual material, readings, exercises: any elements that would reinforce understanding. A humanities lecturer described this process as "building a narrative"; for a science lecturer it was about identifying concepts that would be difficult for students to understand and to incorporate strategies that would enhance comprehension; for an engineering lecturer it was about choosing problems that could be jointly solved with students so that the thinking processes involved were made explicit.

There was far less agreement on what lecturing was most likely to accomplish. Gibbs' (1992) six point checklist of what students were likely or unlikely to achieve in formal lectures was presented to interviewees

without any categorisation. Gibbs claimed that in formal lectures students could usually gain knowledge (specific facts) and comprehension (organising facts to make sense of them). Surprisingly most disagreed re knowledge gained, but believed partly or wholly that comprehension could be attained. Gibbs felt that in lectures students were unlikely to achieve application (applying key concepts to solving problems); analysis (identifying interrelationships between facts and developing key concepts) and evaluation (evaluating and making critical judgements e.g comparing theories). Interviewees largely disagreed, either wholly or partly, perhaps reflecting their adoption of a different set of teaching objectives. All except one, however, accepted Gibbs' view that synthesis (synthesising information to produce original ideas) was unlikely. Several offered their own view of what lecturing could achieve, and spoke of building an emotional connection to content, of inspiring students to create meaningful perceptions for themselves so that they "owned " the material, and did not just accept it as "received experience."

As expected, lecture format variations reflected disciplinary constraints, but some shared elements could be identified. These successful lecturers opened their lectures with an explanation of where the topic or theme fitted into the development of the subject overall, so they reflected back to the previous lecture and then set the scene for what would follow with a brief overview. There was a conscious effort to provide a framework for learning, but there was also a recognition of the need to engage the student's interest and to personalise the learning experience. The sequence varied but there was a pattern of using positive nonverbal signals to establish intimacy: a smile; eye contact with as many students as possible; proximity; and to then reinforce this connection with a greeting, a pleasantry, perhaps some opening banter or reference to a recent event of common interest. The next stage was to arouse interest. Sometimes this took the form of an opening case study or problem with a question attached: how are we going to approach this? Sometimes it was an attention getting statement, or a reference to the topic's professional relevance; occasionally it was a challenge to preconceptions about the topic. But driving these opening gambits was an awareness of the importance of capturing student attention, expressed in one interviewee's comment that "you need to get to them in the first five minutes."

This theme of the need for engagement flowed through into the activities that the lecturers employed to involve students in the learning process. Scientists tell us that the brain switches off after twenty minutes of concentrated listening (Lucas 1999: 45). These lecturers seemed well aware of the need to vary their delivery, to monitor the level of involvement and to adapt or change what they were doing if they felt it was not working. A problem solving exercise might involve open textbooks and suggestions from the floor so that step by step the students modelled the problem solving process with the lecturer acting as facilitator, rather than expert informant. Rather than simply giving information, wherever possible these lecturers

helped their students to discover together what they needed to know, using whatever means seemed appropriate: exercises, quizzes, role plays, pair and group discussion. There was the opportunity to apply a formula, to put a principle into context. Even with the biggest groups of hundreds of students the lecturers asked for feedback or used pair work and then took a sample of responses, but there was also here an element of performance, a recognition that with such a large group one had to work harder to maintain interest.

In concluding the lecture there was an attempt to bring together what had been covered. There were references to reviewing the material or reflecting on its relevance, often by linking back to the opening gambit, particularly if it was a question or problem. One lecturer referred to this as the "so what?" segment, and threw this challenge out to the students in the concluding minutes so that in an open forum they had to make sense of the content's relevance to their professional practice. The content of the next lecture was usually foreshadowed; every effort was made to place the lecture within a wider learning context so that knowledge was not fragmented. Sometimes a problem was set for students to tackle on their own, or they were left with a question to think about." Leave them wondering" was how another lecturer summed this up.

Information technology was seen as a valuable learning tool but there was some suspicion that the growing pressure to put courses online was driven by economic rather than pedagogical imperatives, and was often poorly implemented. One spoke of an online course in which the live lecturer had simply been filmed delivering the lecture notes; another remarked that "a university is not just an online publishing house." However there was an acceptance that technology had to be embraced and used creatively as an additional way of learning. Most had incorporated some element of online learning into their subject: useful follow-up material, or pre-reading had been placed on the subject website; some set up online discussion groups; simulation exercises were used to reinforce theory. But all believed that there was a role for lecturing that technology could not replace, although most had accepted that in the future there would be less lecturing. Their support for lecturing was based on their belief that learning was not just transmission of material - that it was about making meaning, establishing connections, developing motivation and interest. It was also made clear that lectures allowed for this humanising of content in a way that an online course could not. A morning news item could be incorporated into the lecture almost as it happened; personal observations or references to industry experience could increase relevance. Perhaps the discussion was best summed up by one lecturer's remark that lecturers "need to be more than just a set of notes- they need to make meaning happen."

None said that lecturing was easy. They battled with large group sizes, crowded curriculum; the intricacies of group dynamics; the individual needs of an increasingly diverse student body; the tension between providing material and constructing understanding. In meeting these challenges their lecturing style had changed over time. There was more self criticism and self reflection and a willingness to change direction mid lecture if the approach was not working. They tried not to make presumptions about what their students knew and to respect their abilities, to hand responsibility for learning back to the learners. They had moved beyond presenting " a slab of material towards a mutual exploration model." They had recognized that learning is a social process that occurs through interaction in a cooperative setting (Johnson, Johnson and Smith 1991). Their reward was the pleasure and satisfaction that they spoke of when they lectured successfully.

What emerges clearly from this discussion is that effective lecturing is a vital part of the student learning experience but that it is not an easy task to master. Texts and workshops on lecturing can assist in developing skills and strategies to use, but to lecture successfully lecturers need to move beyond the simple transmission model that so many of them experienced in their university studies and to develop an interactive model that is soundly based in teaching and learning theory. Ramsden (1992: 242) speaks of "effective teaching and assessment as a kind of conversation between lecturers and students." Like any good conversation it cannot follow a set format and it must engage both parties. The lecturing style must reflect the discipline and the personality of the lecturer and the needs and nature of the students. These lecturers had "found their own voice" and had through experience and reflection developed a teaching philosophy that underpinned their work and engaged their students. But what of their less successful colleagues? There needs to be a recognition that:

University teaching requires professional training: by that I mean a long, in fact lifelong, programme of study, practice, and reflection on practice through which teachers develop their skills and understanding of what it means to be an effective educator in a university environment. Educational development then, is essential for continuing high quality in higher education.

(Ramsden 1993: 42)

Newly appointed academics are usually given no formal training in teaching; perhaps the time has come to question this practice.

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