Developing alternative teaching skills through a programme of video analysis and mentoring

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Background and rationale

In 2000, the University Learning and Teaching Strategy funded an Innovation Project to change a traditionally taught module to a module based on social constructivist principles. The project team found that whilst the changes to the module improved student learning, they had overlooked the demands these alternative methods would make on the teaching skills and expertise of colleagues. The changes not only required lecturers to *think differently* about how they teach, they also required them to *act* differently in the classroom e.g. from 'telling' to 'questioning' behaviour. Getting students to actively engage with each other and negotiate meaning, rather than *imparting* knowledge, seemed particularly problematic. At times it was all too tempting to revert back to *telling* students what they 'should' know rather than facilitating the generation of students' own ideas and encouraging a spirit of enquiry.

Of course there could be many factors that affect classroom practice, including the teacher's beliefs about the students and the subject she is teaching. I therefore conjectured that in order to develop appropriate instructional behaviour we would first need to understand and work on the factors affecting classroom behaviour. To do that Thompson (1984) recommended:

Studies employing intensive audio visual records and documentation of teachers' instructional behaviour, followed by systematic analysis and stimulated recall in informal settings…(Thompson, 1984, p.126)

I had already compiled about 40 hours of video recordings of teachers' instructional behaviour from my previous project and I planned to review these with my colleagues so that they could analyse and reflect on their own instructional behaviour. Wilkerson et al. (1991) had developed a useful tool for analysing tutors' styles of facilitating student learning that I adapted to analyse teaching behaviour and skills for this project. The following points formed the basis of this framework:

- who initiates topics for discussion;

- the style and pattern of tutor talk;

- the use of questions;

- the pattern of student-tutor interaction;

- silences and interruptions.

The task now was to develop some form of staff development programme that would encourage tutors to reflect on their practice and identify areas that they wanted to improve or change. My role would be to support and guide colleagues through the change, acting as a critical friend and mentor.

The innovation

My original innovation project plan (July to December 2000) had been to:

- Review and edit all video tapes from point of view of learning about teaching skills

- Identify key teaching skills, problems, concerns, etc.

- Set up and run a mentoring scheme within module teams.

- Gather data for post session review and evaluation by participants and mentor. (video record further sessions if appropriate)

However, following discussions with the Associate Dean for undergraduate studies, I revised this project plan in order to work specifically with colleagues who, for various reasons, felt compelled to change the way they teach. Their agenda was to develop new modules or redesign existing ones using more innovative teaching and learning strategies. They were not particularly interested in reviewing videos of someone else's teaching. Their priorities seemed to be to get their new modules developed, then worry about staff development aspects. I was disappointed that they were not interested in such a rich resource of tutor practice but encouraged that they had agreed to pilot some of their new sessions in semester 1, 2001. I anticipated that the pilot sessions would make them aware of the need for a range of facilitating skills and motivate them to develop them.

We planned a series of pilot sessions to take place before the end of semester 1 that would help students build their knowledge of the marketing concept 'distribution' (See lesson plan Appendix 1). The session would also develop a range of skills demanded of marketing professionals such as critical thinking, creativity and presentation skills. The strategies included an in-class transactional reading activity (Borasi et al, 1998; Pearson & Fielding, 1991), small and whole group discussion and the use of posters to summarise and share findings. Tutors would need to use a wide range of teaching and classroom management skills to implement these strategies. These were the subject of a number of conversations and planning meetings with the module leader.

Outcomes

During the implementation of the sessions, I acted as a non-participant observer moving between classrooms to see how different tutors and students were adapting and responding to the changes (see Adler and Adler, 1994, p. 380; Angrosino & Mays de Perez, 2000, p. 674; Robson, 1993, p. 208). It was not possible to video record the sessions so I made extensive notes to which tutors also referred during the post session evaluating meeting after the sessions.

There seemed to be wide variation in how tutors adapted to and implemented the new teaching strategies. For example, one tutor felt very comfortable with this approach and his students seemed to engage with ideas and build their own knowledge as intended. Others reverted back to tried and tested strategies to 'top up' or 'fill gaps' in student knowledge by giving a formal lecture at the end of the session. They also tended to respond to students' requests for help by *telling* them what they wanted to know rather than using tactical questioning (Adhami, 2001; Mason et al, 1985) and encouraging them to use their tacit knowledge (Polanyi 1962) to think through the problem. Some tutors chose *not* to run the poster activity and this meant that students we unable to share and discuss ideas with their peers in other groups.

Evaluation

I planned to use three methods for evaluating the effectiveness of the strategies on student

learning. First, the tutors would discuss their initial impressions in a post session evaluation meeting immediately after the session. During this meeting I would also encourage them to reflect on their teaching skills and practices. Any further thoughts would be shared by e mail. Second, tutors would ask students to comment informally on the session and the strategies used at the end of the session. Third, there would be a compulsory question on 'distribution' in the examination, the answers to which would be analysed for depth of knowledge and understanding. These are discussed below.

Post session evaluation

On the whole the tutors agreed that the strategies had been effective in encouraging students to think for themselves. However my observation field notes suggested that students in the class whose tutor was less familiar with the new strategies appeared to be waiting passively for the tutor to steer them in 'the right direction'. The classroom was almost silent even during the small group exercise and few participated in whole group discussion. The main activity seemed to be copying from overhead slides and making notes on the lecture that followed. In contrast, the class whose tutor was more familiar with the 'new' approach engaged in lively discussion, made posters and contributed fully to the presentation of their group feedback. I noticed one or two students making additional notes during this session but the majority seemed too engrossed in the discussion to make extensive notes.

When asked to reflect on the session one tutor revealed that he had decided not to use the poster session because 'it was a lot of hassle and students' answers would be very variable'. He seemed to believe that students come to the module as empty vessels and that the job of the lecturer is to fill them up with theory and knowledge.

> Lecturer: See I actually don't even need them to go to more than one text book. That's not the requirement. The requirement is to get the basics in place as to what is marketing research? What is promotion? What is pricing? …It is that fundamental basic knowledge. The basic principles. And there's a lot to get into their heads (Interview transcript 4.9.01)

Lecturers holding this conception tend to adopt traditional approaches to teaching and use methods such as lecturing. These tend to encourages surface learning (Thompson, 1984; Crawford et al, 1998; Prosser and Trigwell, 1999; Ramsden, 1992). But in spite of a large body of evidence that this approach is ineffective in encouraging deep learning, it still appears to be the dominant approach in higher education. (For a recent survey on the teaching techniques used in university classrooms see Lammers and Murphy, 2002). This makes it much harder for colleagues to accept and adopt alternatives (See Future Developments below).

Student feedback

I received feedback from only the students whose tutor had implemented the new strategies fully. They were unanimous in their preference for this kind of active session and most indicated that they had learnt more than they would have done simply by taking notes and listening to the lecture.

Examination results

Analysis of the performance for the question based on the 'alternative' distribution session is still not available.

Future developments

In this project I had hoped to encourage a number of my colleagues to adopt alternative and innovative teaching and learning strategies and to help them develop the teaching skills they would need to implement them thereby maximising the opportunity for deep learning among their students. The project revealed that while there are pockets of tutors who feel comfortable with these approaches and adapt easily to them, most do not. My plan to encourage change amongst a number of colleagues in this sense has been largely unsuccessful.

However a number of political, cultural and institutional factors seem to have mitigated against the changes that had been planned. For example, in its drive to increase efficiencies in teaching and learning practice, WBS has geared itself up for more rather than less formal lecturing. While student to staff ratios of 45:1, reduced number of module iterations and investment in mass audio visual equipment in classrooms help reduce costs, they also seem to reduce the possibilities for small group work, discussion, debate, inter group activities and experiential activities. Instead they assumed the main approach to teaching would be the traditional lecture. Even the university timetabling and administrative systems are based on traditional teaching models. So to do something different within this environment requires a great deal of effort and conviction. Those who are apprehensive about adopting alternatives strategies are more likely to stick with what they know.

The innovations projects have allowed individuals to make changes to their own practice and, in some cases, ideas have become par of mainstream practice. However, I now believe that in order to develop more social constructivist conceptions of teaching and learning and to develop the teaching skills that encourage deep learning, we must turn our attention to school and university structures, policies and decisions that affect teaching practice and development.

Appendix 1

Pilot session: Marketing – Channels of Distribution

VENUE: Tutorial rooms as timetabled.

AIMS: The purpose of this session is to:
- Identify and discuss issues associated with common channels of distribution
- Consider advantages and disadvantages of these from different perspectives

OBJECTIVES by the end of the session the student will be able to:
- Recommend an appropriate channel of distribution to be used in a given scenario
- Present the arguments for and against other forms of distribution
- Justify the channel recommended in drawing on relevant theory .

Rough timing	Topic	Tutor Activity	Student activity	Materials needed
10 mins	Introduction to topic and task	Please take an attendance register. Explain purpose of session. Explain the task using slide so students know what they are supposed to do. Get students into groups of between 4 and 6. Give out one scenario to each group	Ensure name is on Attendance sheet. Form groups	Attendance sheet. Slide: Task instructions
40 mins	Distribution exercise	Set them off on tasks and facilitate. (You may need to lend them one text book per group and encourage them to use it rather than just ask you. Ideally they will have read the chapter before hand) Encourage students to use their own experiences as consumers or employees to inject some realism into the mix. Issue 1 or 2 pieces of flip chart paper per group and a couple of marker pens. Explain what this is for. Encourage slower groups to catch up.	Form groups. Read through and discuss the scenario & task. Decide what information you need to tackle this problem and select relevant sections of the text book, your own notes, etc. Draw on own experiences where possible. Present your findings and recommendations on flip chart paper	Text books. Flip chart paper, blu tack and pens. (SMART boards can be used effectively here if available)
30 mins	Review of posters (Allow 5 mins or so per group)	Tell students to blu tack their posters to the walls and invite each group in turn to talk through their group responses to the task. As each group mention a "key" word or phrase or concept that would normally have been part of your lecture, mark it up on the white board ready for discussion later. After each group has explained their posters, invite comments and questions from the other groups. (THIS WILL TAKE SOME DOING AS STUDENTS ARE RELUNCTANT TO SAY MUCH INITIALLY BUT I USUALLY GET THEM TO ASK ONE QUESTION OR MAKE ONE COMMENT PER GROUP. I also ask the other groups questions as well e.g. did you find the same issues in your scenario? Why? What do you think they might have overlooked? What about the cost? etc. In other words get them to discuss between the groups with you acting as chair).	Present group work. Discuss issues. Compare and contrast scenarios and solutions	Students' posters
20 mins	Plenary review of the key learning points arising from the posters	Return to the key words and phrases marked up on the white board. Pick out the things you want to know about in particular and use Q & A to get students to identify connections, relationships, patterns, etc that relate back to key learning outcomes. Summarise these with a slide or two as necessary. If appropriate identify issues that they did not come up with but which you want them to think about for the exam.	Make notes	Summary slides if necessary

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