STUDENT EXPECTATIONS OF TEACHING AND LEARNING

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Abstract

Higher education aims to develop students as life-long learners. Facilitative, learning-centred approaches are more likely to develop independent learners. However, these learning methods may challenge students’ conceptions of “good teaching” developed from their previous learning experiences. Student beliefs and expectations about teaching were examined through interviews of a small number of students as part of a wider study looking at developing techniques to assist students to become more aware, engaged and appreciative of their learning experience. The analysis of the interviews offer some useful suggestions for lecturers engaged in teaching professional disciplines wishing to use facilitative, student-centred teaching approaches.

Keywords: student-centred learning, student expectations, student conceptions of learning

INTRODUCTION

A key objective of tertiary education is to encourage independent learning. One problem that lecturers face is that students are becoming increasingly “strategic learners” and will adopt approaches that will help them achieve what they perceive as their main objective – good assessment outcomes. This can sometimes lead them to adopt surface learning strategies that merely mimic or reproduce what they have been taught in class. Lecturers need to devise teaching methods that challenge and stretch students into developing good learning skills (Biggs 1999).

Students transition from a guided teaching regime at school into a less structured learning environment at university. Their conceptions of teaching will therefore be formed from their school environment and either reinforced or confronted by what they then experience at university. Bernhold (2007) describes how engineering students appear to favour lectures and examinations because the majority of their lecturers use this teaching paradigm. There is not always great incentive for teaching differently. Teaching innovations which take students outside their comfort zone and their expectations of teaching and learning, can generate poor teaching performance evaluations (Bernhold 2007, Crader and Butler 1996). For example, Chappell reports a “grieving process” when students were required to undertake problem based
learning that was a severe challenge to their conceptions of learning. They did not appreciate the facilitative nature of the teaching: “the lecturer discusses but doesn’t seem to have a clue…”. “I am beginning to dislike this module as I get further into it. …. it is just the way it has been structured and the way it is taught or not taught….” (Chappell 2006, p24). These students had experienced lecturer-centred modules in first semester, and were required to make considerable change in their learning approach and conceptions of learning.

So what factors, if any, can assist students to appreciate the benefits of active student-centred learning approaches?

This paper is based on the analysis of a number of student interviews examining their acceptance of a range of teaching methods designed to encourage independent learning, skills development and knowledge acquisition.

The teaching processes employed and intended learning outcomes (in brackets) were:

- reflective journaling on vocational skills development, with supporting material and tutor support (skills awareness and development);
- role-play and simulation (technical knowledge acquisition and application);
- project-based learning in teams (skills and knowledge building).

The following sections provide further background on the research underpinning this study, ie student conceptions of learning and teaching methods intended to develop independent learning, and offers a concept map that links the influences upon student learning.

**STUDENT CONCEPTIONS OF LEARNING**

The conceptions that students hold about learning will affect their study approaches. Biggs (1999) proposed a model which describes students as surface or deep learners. Säljö (1979), Ramsden (1988), and Marton et al (1993) offer further descriptions of learners’ characteristics. Surface learners will see “teaching as telling” (Bowman 1999) and will typically appreciate lectures, rote learning and regurgitation of facts through tests and examinations. They see themselves as the recipient of ‘wisdom and knowledge’ from their teachers and will not enjoy situations where they are required to be active participants. Deep learners will approach study as something interesting and even exciting in and of itself. They will attempt to abstract meaning from information and link it in new ways to build their own constructs of knowledge.

There is a consensus that facilitation techniques (teacher as guide or coach) are more likely to develop deep learning approaches and build independent learners and are therefore to be encouraged (Biggs 1999, Kember et al 1997).

**DEVELOPING INDEPENDENT LEARNERS**

‘Student-centred learning’ is becoming a familiar term used to describe a teaching approach intended to encourage students to develop their ability to learn and in the
process develop greater independence and take responsibility for their own learning. Students come from a school environment that encourages dependence on the teacher. The shift to higher education requires a shift in that dependence. Students with more surface learning preferences will not react well to student-centred teaching approaches.

A number of teaching methods can assist students in this capacity-building:

- encouraging reflection on skills and learning through diaries, reflective journals or on-line blogs;
- project-based or problem-based learning (PBL);
- negotiated learning – learning contracts or developing topics for in-depth study as in dissertation or theses (generally used in the final years of a degree programme);
- role play and simulations using real-world examples where possible;
- self- and peer-assessment;
- skills training and support.

These approaches can confront students conceptions of learning. A number of these approaches were used in a construction technology unit. The following discussion outlines the method and the intentions and outcomes of these approaches adopted to encourage students to build their own constructs of knowledge and “learn how to learn”.

METHOD
A sample of students were interviewed to provide an in-depth understanding of their expectations and experience of the course in which they were enrolled. Semi-structured interviews were carried out that focused on the following topic areas:

- Motivations for enrolling on the course;
- Expectations of the teaching and learning activities they would undertake;
- What teaching they found most effective;
- Expectations of the course in terms of outcomes ie what they might learn.

The interviewer had a series of prompt questions to ensure that each interview covered the topics. Once the interview started, the process became inter-active with the interviewer summarising and checking for accuracy of interpretation and understanding (as recommended by Ashworth and Lucas, 2000). The interviews lasted for between one to one-and-a-half hours and were recorded and transcribed for analysis.

Sample
Students were invited to participate from a class of 90 students taking a 2nd year unit in construction technology. The class was composed of students enrolled in a choice of three degree programmes - 20% of the students were enrolled in Architecture,
43% were Construction Management students and 33% of the students were enrolled in the double degree Architecture and Construction Management. A total of 24 students agreed to participate in the interviews.

Analysis
The transcripts from the interviews were analysed for common responses to the questions and these responses grouped accordingly. Categories that emerged from the data were discussed for conceptual verification by the research team.

ANALYSIS AND DISCUSSION
Student Motivations
All the students had enrolled on these professional degree programmes because they were vocational in nature. Motivations ranged from “childhood passion” (Architecture student) to “stable career choice” and “financial security” (Construction Management students). They have a clear focus on their career and most want to obtain the technical skills and knowledge that they see as being the primary requirement to enter the profession.

Student Expectations
Students generally found it difficult to articulate what they expected from their degree programme. However, when asked about what they liked or did not like about different teaching situations, they were much more able to articulate their conceptions of what was good or poor teaching and where they were frustrated or confused by staff expectations. If staff were clearer about their expectations, they felt more comfortable and certain about what they needed to do. It was evident that their expectations had been largely set by their earlier experiences in the first semesters at the university or even before they entered the institution. This is in line with work by Hill (1995) where students’ expectations about services remained stable over the course of 3 years of consultation.

What Students Want From Staff
Students were asked to describe the elements of good teaching and what they expected lecturers to do in helping them to learn effectively. Responses typically covered the following areas:

- Passionate, enthusiastic, humorous, entertaining
- Well organised and prepared
- Clear in their expectations of assignments.
- Manageable workload
- Makes the course relevant
- Illustrates with personal experience (or brings in practising professionals)
- Able to challenge students

The most important feature was for a lecturer to be passionate about their subject, engaging, motivated, and involved. If the subject being taught was not of great
interest to them individually, they needed the lecturer to be entertaining for them to engage, this being especially true of students with lower motivation ie merely interested in passing the course. The higher achievers however, wanted staff to challenge them and draw out their potential. These findings coincide largely with those of Kember and Wong (2000) and Kember and Kwan (2000).

Clear communication was also frequently commented on – they wanted teachers to be clear in their expectations and to use appropriate language – some staff were guilty of being somewhat out-of-touch with students – using language more suited to a peer or setting standards too high.

STUDENT-CENTRED TEACHING
The processes used for this group of students included:
1. reflective journaling on vocational skills, with supporting material and tutor support (skills awareness and development);
2. role-play and simulation (technical knowledge acquisition and application);
3. project-based learning in teams (skills and knowledge building).

1. Reflection on skills awareness and development
Schön (1983) suggests that the development of any professional as a practitioner requires the development of the ability to reflect whilst taking action and to later reflect on actions taken – a process of continuous learning. In order to develop thinking skills, one needs firstly to be aware of ones current skills level and secondly to be able to monitor and implement alternative strategies – a process of reflection or metacognition. Devlin (2002) points out that in order to develop the ability to think reflectively, students must be willing to take some responsibility for their learning. Reflection can be developed through diaries, journals or online blogs (see for example www.pebblepad.com) to help students increase their awareness of what they are doing and how to improve – vocational and learning skills can be a key area of development.

Students were required to complete weekly reflective journals on vocational skills development (communication, teambuilding, conflict resolution, time management, writing skills, presentation skills) with guidance materials for them to read and use as a basis for their reflections. Tutors gave formative feedback on the journals encouraging deeper examination. The reactions to this process were mixed.

- Feelings of confusion, scepticism, anxiety and frustration
Initial reactions were of confusion and a certain amount of scepticism. All students struggled with the concept to begin with, mainly because they weren’t really ‘expecting’ it and had never done it before, and also because they couldn’t see how it was relevant to the course. They doubted their abilities and were not confident in writing their journals. This is a typical reaction – when anyone is faced with an unknown quantity that requires change, there is inevitably early resistance, and often
negative feelings (“what is the point of doing this?”) akin to the first stages of the grieving process (Chappell 2006). A number of students did feel that towards the end of the semester they had a better understanding of what they were doing but there remained a number of students who “went through the motions” when completing reflections.

- Positive comments
A lot of students had quite a positive response to journaling. They could see the benefit – it had made them think about things in different ways and understand themselves, the course and their group members better. Many students actually enjoyed the process of journaling weekly. Many also felt it helped them make concrete what they already knew, it made what they were doing in class more ‘conscious’. The vocational skills were mentioned a number of times as surpassing their expectations – something that was important that they hadn’t considered. Many students really liked being taught these – many couldn’t see the relevance at first but then as they started to get further into the course things such as time management and conflict resolution and especially team roles came to be essential to their experience of the course.

- Negative comments
The main complaints about completing the journals were that they involved too much work, and were not seen as relevant to the course and not relevant to the job (i.e. this was not something they would ever do at work). These aspects really jarred with their expectations of what they thought the course should really be about. Some students also said that they reflect anyway and shouldn’t have to write it down – “everyone learns from their mistakes anyway”. Some students really thought that the journaling was a waste of time and were very frustrated with the required reflections taking away from the construction technology content – which they felt was limited anyway. Students placed greater emphasis on knowing technical content which they saw as more essential for joining the workforce. This corresponds with an international study by Bradbeer et al (2003) which found that the majority of students saw learning as an increase in knowledge, with it’s application a useful secondary aspect.

- Suggested improvements
Further guidance was mentioned as being helpful such as workshops or tutorials on journaling where they could have discussed what to do. One student suggested that a blog would have been better, then he could have learnt from reading other students’ reflections.

Students suggested that both the vocational skills and study skills would be good to be taught as a separate class. Whilst students could see the value of these approaches, it’s introduction into a construction course “just confused the point of the class. It was all too much together.”
This was perhaps the least successful of the teaching approaches used. The staff on this program were aware that reflection as a process was likely to be stressful and generate difficult emotions and had emphasised to the students how reflection was a key part of practice as a professional. The vocational skills were introduced as “employability skills” to make their relevance more obvious. However, despite these efforts, students seemed to struggle mainly with the relevance of what they were doing. Additionally, the ability to be self-aware seemed to be quite difficult for a number of them. There was also apparent a need for more support – early tutorials or workshops to help the students work out and understand what was required.

2. **Role play and simulations in combination with**

3. **Project and Problem-based learning (PBL)**

Simulations and role plays place the student in some imaginary or real-world situation in which to act out a given situation. They can be used in combination with a problem or project with the aim to deepen students’ conceptual understanding of the real world. Roles can range from highly prescriptive with actions programmed and structured to very loosely defined. Role-playing can give students complex problems with no ‘right answer’ – very much like the real world (Cage 1997).

Problem-based learning or project based learning can set up major challenges for students. Lecturers become facilitators of learning rather than a ‘fount of wisdom’. Lectures may be few and students are required to undertake independent study and research to address the problem set. The tasks can be very challenging for students who may be required to set their own boundaries to the problem and even propose self-assessment regimes (eg portfolios). Problem-based learning (PBL) is an instructional method that challenges students to "learn to learn," working cooperatively in groups to seek solutions to real world problems (Ross et al 1985), Biggs 1999). These problems are used to engage students' curiosity and initiate learning the subject matter. Both role-play and project based assignments involve research and problem solving that encourage students to retain knowledge that they have constructed for themselves (Blatner 2002) and develop skills that are difficult to teach using more traditional methods of instruction – teamwork, initiative, self-awareness, problem solving, communication, organisation.

Students role-played as ‘opposing teams’ of professionals analysing and discussing a building design (the “problem” or project). The students were unanimously supportive and enthusiastic about this aspect of the program. They felt role-playing was a valuable and constructive approach to learning what could otherwise be a relatively dry subject (the Building Code of Australia). The following synthesis of comments from this section of the interviews indicate the attitude to the role play

- a good means of learning new information, meaningful and memorable
- mirrored the workplace, realistic and relevant to the profession
- practical and transferable
• discussions without a tutor present allowed more autonomous working and removed any “performance anxiety”
• in-depth study, but can limit research on a wider front
• needs the ‘opposing team’ to have done their work properly otherwise no real constructive, critical discussion happened
• got to know other students better through teamwork

The project-based role play in construction teams was seen as a great way to get to understand the subject matter in depth, not only because it mirrored what they would be doing in the work place but also it was the most constructive ‘retelling’ of information they had done as students. They really liked the practicality of the approach. Students compared it with the lecture/examination model: “(examinations) can be a good easy way to get marks – memorising – but you don’t actually learn anything. Well I don’t anyway – just cram and then forget the next week!”; “this (examinations) mode of learning is unlikely to be like anything you would do in the work place – so why teach it like that?”, “but in this setting (role play) you have to really ‘know your stuff’ in order to have a coherent discussion about the topics at hand. It can be a bit more work but you really remember everything you learn.” One student even commented how this approach gave them transferable skills - perhaps the first evidence of students recognising they are being taught how to learn.

Problem-based role play was altogether a much more successful teaching intervention.

CONCEPTUAL FRAMEWORK
The interviews suggest some clear preferences for problem-based role play largely because of it’s perceived relevance to future professional practice. Skills development was gained implicitly. However, when students were required to be more self-aware and explicit about the skills they were using and developing, (through journaling), they became more resistant, failing to see the direct relevance of what they were being asked to do. Despite efforts at inducting and explaining the relevance of the reflection process to students these were only partially successful. As students continued with journaling, more became appreciative of the benefits. With hindsight, more time needed to be spent on explaining and introducing reflection, and the staff were perhaps too ambitious trying to introduce too many new teaching interventions at once. The keys to successfully introducing student-centred teaching appear to be to make direct relevance of any tasks as clear as possible and spend more time at the beginning of the programme supporting any difficult emotional issues with better explanations and even separate workshops (Figure 1).
CONCLUSIONS

Student-centred learning is recognised as a potentially very effective means of assisting students to become self-directed learners. From the range of methods available, role play, problem-based learning and reflection were used in a class of construction students to help develop a range of learning and vocational skills. Whilst the sample of students interviewed for this study was small, the comments are likely to be representative of the whole since similar issues of acceptance of student-centred teaching are reported in the literature (Chappell 2006, Kember and Kwan 2000). One of the key issues highlighted by the student comments appears to be the necessity for ‘relevance’. When relevance of the study task was clear, students were very enthusiastic and thoroughly enjoyed the process (problem-based role play). When relevance was less obvious (reflection), students exhibited a lot of resistance, that in some cases persisted throughout the semester. They found the experience quite stressful and frustrating – their core assumptions and conceptions of learning and teaching were being challenged. These conceptions will have been formed by their experiences of learning at school and reinforced by “normal” lecture and examination formats at university. If non-traditional teaching methodologies are going to be accepted as a norm - they must be introduced early into the curriculum and given support by additional workshops or even separate courses on study and vocational skills development. It is important not to underestimate the time and support needed for changes to student conceptions. Even though staff thought they had prepared the students and explained the relevance of reflection it was obviously not sufficient for the students.
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