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# Working with conceptions of teaching to underpin lasting change

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For some time now universities have been faced with the challenge of moving to an approach to teaching that is learner centred to enhance the student learning experience. For many institutions this has necessitated a shift in the way many academic staff view learning and teaching and how they conceptualise their roles as teachers. Bringing about such change has highlighted the important role of academic developers and how academic development work can best be done to ensure meaningful and sustained change.

In this paper we describe a collaborative project aimed at improving the learning and teaching culture in a large school. Adopting a philosophical approach to academic development that departs from the traditional notions of this work, and informed by the literature on conceptions of teaching, approaches to academic development and cultural change, the first stage of the study has been directed at identifying staff conceptions of teaching and learning. Identifying staff conceptions is seen as an important and critical phase and will underpin the second stage which aims to use a deep approach to changing teaching beliefs and practices within the school.

Work so far has illuminated many issues around teaching culture and practices and has also unearthed a keen desire amongst academic staff to change and improve their current practice. Reflections on our roles and work as academic developers suggests that if meaningful cultural change is to occur within this context there needs to be a slow, sustained and deep approach to academic development within the school.

Keywords: conceptions of teaching, change, academic development

## Introduction

Academic developers in universities are often charged with the task of improving tertiary teaching practice. To effectively achieve this task, academic developers often need to challenge academics' beliefs or conceptions about teaching and learning in order to help them change. When academic conventions and long-held deep-seated beliefs are involved, changing beliefs can be very difficult (Kember, 1998). However, studies have shown that academics can change their conceptions of teaching over time (Martin and Ramsden, 1992; Ho, Watkins & Kelly, 2001). A link has been established between teachers' beliefs about

teaching and how they approach their teaching which in turn has an effect on the depth and breadth of student learning (Trigwell, Prosser & Taylor, 1994). This link is critical given that the quality of the student learning experience, in an expanded and restructured higher education sector, is after all the ultimate aim of improving tertiary teaching (Biggs, 1999; 2003).

In the mid 1990's teachers' conceptions of university teaching was the subject of much research. By the end of the 1990's Kember (1998) located 14 different studies which focussed on university academics' beliefs or conceptions of teaching. Kember found that there was general congruence about the types of categories that were described across the 14 studies. His synthesis of these categories identified 5 conceptions of teaching along a continuum ranging from a teacher-centred/content-oriented pole to a student-centred/learning-oriented one.

This paper discusses how we, as academic developers, worked with the Head of a large school in a university to support a staged learning and teaching project aimed at shifting the culture in the school and explores a philosophical approach to academic development that privileges relationships, embodies a deep understanding of the complexity of change, and utilises what Fullan refers to as 'slow learning in context over time' (Fullan, 2001, p. 121).

## **Background**

At the beginning of 2006, the newly appointed Head of school was concerned about staff teaching practices, poor student evaluations, poor student participation rates, low staff morale and a poor learning and teaching culture within his school. Consequently, he asked for assistance from the Dean, Academic Development and the learning and teaching team.

We met with the Head of school to agree on the best way to respond to the issues he had identified. In our roles as academic developers we listened carefully to his concerns. It was clear that there were deep-seated problems with the culture of the school that arose, amongst other things, as a result of a difficult merger between two schools. Consequently, we all believed that it was very important for us to have an understanding of the culture of the school from within and that if we were to have any impact at all it was also important for us to gain the trust and confidence of staff before we could address any of the issues that had been raised. There is much evidence to suggest that successful change initiatives rely on fostering purposeful interaction and meaningful relationships (Fullan, 2003; Reid, 2002).

After much discussion and thought the Head agreed to set up a staged learning and teaching project that would allow us to get to know the staff as individuals, in the first instance, over a period of about twelve months. Drawing on the work of Kember (2000) and mindful of the need for an alternative approach to educational development we believed it was necessary to first identify conceptions of teaching practice before we could begin work on improving teaching practice. We also took the advice of Kember and Kwan (2000) to take a long term approach to change and accept that deep change in teaching practice takes place over time.

We had agreement from the Head that this would form the first part of a longer project aimed at improving teaching practices in the school. The outcome of this first phase of the project was to simply identify the beliefs about teaching practice that underpin the teaching in the school's undergraduate program and to establish meaningful relationships between ourselves and the academic staff in the school.

## **Methodology**

In this section we describe the methodology used for this first phase of the study.

An action learning and case study approach underpin the study. A case study approach was specifically adopted because it offers rich, subjective data which can provide insights and meanings that may lead to further research (Burns, 2000). A case study approach also allowed an exploration of the broader learning and teaching culture in the school as well as lecturers' specific approaches to learning and teaching in the program itself. Overall, a qualitative approach to the study was chosen because this type of approach to research is used when describing, understanding and explaining complex phenomena to gain a deep, holistic understanding of a complex topic (Bogdan & Biklen, 1992). It was hoped that by exploring this school in depth in the first stage that insights and meaning would be gained to benefit both the lecturers and students and that the information we obtained would help us in our longer term work as academic developers working with the staff in the school.

In the first stage, data was gathered through semi-structured interviews. All academic staff in the school were invited to be interviewed about the undergraduate program and their views on learning and teaching in the school. Participation was voluntary and resulted in 13 out of the 22 staff teaching in the program agreeing to be interviewed. Participants included lecturers with teaching experience that ranged from 2 – 25 years, with most teaching a combination of full-time and part-time students in the program using a lecture plus tutorial mode.

Interviews were conducted by the academic developers and data from the interviews was recorded by a note-taker. The interviews lasted for approximately one hour each and were conducted using a conversational approach. Interview data was then entered and analysed using NVivo – a computer program designed to assist in coding and analysis of qualitative data (Bazeley & Richards, 2000).

One aspect of the interview explored staff approaches to teaching, the philosophy underpinning their practice, and their views on how students learn best. Important themes and categories were identified and refined. Interview data was then carefully categorised. In some cases, further discussion and re-examination of the categories was needed. Kember's (1998) model for understanding teachers' conceptions of teaching was applied to the data to provide a framework for understanding the conceptions of staff that underpinned the learning and teaching culture in the school.

The second stage of the study, to be undertaken over the next two years, will be based on action research principles (Reason & Bradbury, 2006) and will implement changes to learning and teaching practice based on findings about conceptions of teaching from the first stage of the study.

## **Overview of findings and analysis**

The findings are presented below using the three questions on approaches to teaching that guided our interviews.

### **How would you describe your approach to teaching? What is the philosophy underpinning your practice?**

When asked about their approach to teaching and the philosophy underpinning their practice the majority of those interviewed spoke about how they approached their teaching in a way that allowed students to apply their knowledge. Applying knowledge meant using case studies, practical exercises and linking class work to the world of work. Just under half of the staff discussed the need to support student learning by finding out about student expectations and helping students to identify their own learning styles. Others mentioned the need to be passionate; the need to share personal experience in their discipline area; and the need to make learning fun and interactive.

Only one staff member directly referred to having a philosophy that underpinned her teaching practice which she believed was a “philosophy of learning”. She explained as follows:

“I have a philosophy of learning based on the idea that people come to learn information that is not accessible elsewhere. They come to gain knowledge, expertise and skills... This program can be viewed as a 4 year learning continuum – a time for students to grow, learn, love uni and love learning. This environment is not about the teacher and their content but how they’ve helped the student to learn. Too many teachers have the ‘empty vessel’ approach.”

### **What do you think is more important for students to learn – content or skills?**

Most staff believed that it was more important for students to learn skills than content. Skills that they considered important were: communication, presentation and management skills and the skills for finding information and discerning its usefulness. However, when asked whether content could be sacrificed in order to specifically address these skills in their courses, most were reluctant to make the shift expressing a belief that skills were taught through content, as illustrated by the following comment:

“Content teaches students requisite skills for their careers.”

### **How do you think your students learn best?**

The overwhelming response from staff to this question was that “students learn by doing”. In fact there were 22 comments across the 13 interview transcripts which made direct reference to learning by doing. The following comments illustrate this:

“Active learning is important – being engaged – being engaged in their work and doing something.”

“Experiential learning is best. That is, learning by example, by looking and doing.”

When staff were asked how they knew when a student had learnt something, many talked about the satisfaction of observing in their students the ‘light in the eyes’, an ‘aha’ moment or the ‘light bulb going on’, as illustrated by the following comment:

“...you know they’ve learnt something when their eyes light up.”

### **Conceptions of Teaching**

Using Kember’s (1998) conceptions of teaching model as a theoretical framework, we were able to identify staff conceptions of teaching. As a result we found that under half (38%) of

the staff were located in the transition stage of the continuum, followed by just under a third (30%) in the transmitting structured knowledge stage (see Table 1 below).

**Table 1: Participant beliefs applied to Kember’s conceptions of teaching model**

Teacher Centred content oriented pole		Transition	Student Centred learning oriented pole		
Imparting Information	Transmitting structured knowledge	Student-teacher interaction / apprenticeship	Facilitating understanding	Conceptual change / intellectual development	
1	4	5	2	1	<b>Total</b> 13

Table 1 shows that on the whole there were many staff who were genuinely trying to understand how to best engage their students and in some cases staff reported to us that they were actually putting in hours of preparation in order to meet their students’ expectations. However, when we discussed their teaching methods in more detail in follow-up conversations we discovered that even though many staff identified that students learn best by doing, the teaching strategies that they employed appeared to be much closer to the ‘transmitting information’ end of the continuum.

In follow-up conversations we also discovered that the approach to teaching in the school was almost exclusively an individual pursuit. There appeared to be little sign of a community of teachers or learners and no culture of sharing practice and/or experience amongst staff. In fact, there was a fear of sharing teaching practice and individuals felt enormous pressure to succeed in isolation. This often resulted in feelings of failure when attempts at trying new things did not work immediately. During the course of our interviews we discovered one lecturer struggling with the idea of implementing group work in his classes while another was highly skilled in the area, and yet the two had not discovered this about each other until we suggested that they talk.

However, staff did identify a number of constraints they had which impacted on their choice of teaching methods. For example, many were unhappy about teaching classes of up to 250 students in large, acoustically challenged spaces. They also referred to the difficulties that they had around being able to rely on the technology within those spaces.

It was a therefore difficult not to note that there was universal despair with some of the learning and teaching facilities and that the poor facilities were perceived as having an impact on the learning and teaching approaches adopted by both staff and students. Most participants had similar responses to the one below:

“Horrible! They encourage bad teaching.”

## Discussion

It was clear that regardless of where the participants were on Kember’s (1998) conceptions continuum they had an innate and intuitive understanding of the need for students to make an internal shift in order to learn. What also became very clear to us by the end of the

interviewing process was that despite the fact that morale was low, and that most participants were disparaging about the culture of learning and teaching within the school, there was still an underlying passion for teaching. We discovered, too, that there was a willingness to change but that no-one knew where to begin. Although the majority were not at the 'conceptual change' end of the continuum, we realised they had the potential to make that shift.

This realisation raised a number of leadership questions for us. How can participants, who acknowledge a desire to shift their conceptions of teaching away from the 'imparting and transmitting knowledge' categories as outlined in Kember's (1998) model towards the student-centred learning end of the spectrum, begin to address this? What role do academic developers play in this change process?

Traditionally, quality assurance systems that set out to improve the quality of university teaching focus only on teaching approaches (Kember, 1998). It is quite common to see 'one off' workshops offered to academics that cover topics such as 'teaching large classes', 'using criteria sheets to enhance assessment' or 'making student teams work'. Although staff in the school had attended a number of such workshops in the previous year, this did not seem to lead to changes in their teaching practice or their student evaluations (despite the research suggesting that many staff were in the transition stage of the conceptions of teaching continuum). Whilst there is nothing wrong with 'one off' workshops in themselves, when they are offered in isolation and out of context, they do not address the fact that the motivation to do well, as teachers, comes from within (Hicks, 1999; Ramsden, 2003). If people are to excel they must believe in what they are doing and have a deep understanding of its purpose. By focusing on workshops that impart information about better teaching strategies, universities are finding solutions in the wrong places and are in fact working on the wrong things.

If universities truly wish to improve teaching practice they must invest in academic development programs that focus on sustained relationship building over time. Academic developers must understand the complexity of change and be given the opportunity to set up the conditions that encourage lecturers to use deep approaches to learning about teaching (Ho, 1998; Kember, 2000; Ramsden, 2003; Reid, 2002). Furthermore, academic developers and lecturers need to work together to develop a scholarship of teaching which includes a disciplinary-based approach to research about teaching in order to enhance the synergy between the two areas of academic work (Reid & Petocz, 2003). As Reid (2002, p.9) points out "[an] ideal approach to academic development, then, would be one based on a conceptual change model, one that is firmly integrated with specific department directions and needs, that is consultative and recognises the different developmental focuses of all levels of the academic community...".

Based on our experience, we strongly believe that it is our role as academic developers to help academics focus on building a community of learners amongst themselves, in the sense of a community of practice as developed by Wenger (1999). We see it as our role to first of all help academics recognise that there is a developmental continuum about teaching practice and secondly, to help them locate themselves on that continuum.

An agreed outcome of stage one was to present our findings at an end of year whole staff retreat. We couldn't resist the temptation to use this forum as an incidental academic development opportunity that would help staff identify with us on a deeper level. That is, we decided to present our findings in a way that was interactive and modelled effective teaching

practice. Furthermore, it seemed fairly unjust to only identify their conceptions of teaching without helping them to understand why we thought this was so important. As a result we planned an activity that was aimed at giving them a basic understanding of the theory of constructivism and how this relates to student centred learning. We took a risk, brought in a box of lego and had some fun with them.

The participants were each given a piece of lego and were asked to work in groups of five to build a space-ship using all five pieces of lego. In the discussion that followed we used the lego as a metaphor for knowledge and tried to help the group make links between the learning activity (ie: the act of bringing their own knowledge/lego to the task and sharing it with the group in order to construct a new and more complex body of knowledge/space-ship) and the theory of constructed knowledge. The group responded well to this activity and, despite a few grumblings at first, were enthusiastic and animated by the end of the process. We have found that this has paid off and supports our view that for support to be effective it needs to be integrated, in context, just in time and model best practice.

The project, together with the activities and one-on-one interactions that have occurred over time have given us the opportunity, as academic developers, to form meaningful relationships with the academic staff. Academic developers are often viewed with suspicion and caution because of their perceived interest and role in change (Land, 2001). The interviews allowed for a gentle approach where we attempted to establish respect for the current teaching practice of the participants. We were careful not to present ourselves as experts and were genuinely trying to understand the approach to teaching within the school. It was important to first establish a trusting relationship between ourselves and the academic staff before we could expect them to invite us directly into their private teaching space.

The relationships we have established over the past twelve months are slowly beginning to bear fruit. There has been a perceptible shift in the attitude of staff towards us. We are greeted warmly in the corridor, acknowledged in the lift, and somehow now seem 'one of them'. A couple of staff have even started to venture round to our offices (in the next corridor) to ask for an opinion or some advice.

Some staff are beginning to discuss with us changes to their teaching approach and practice, particularly in relation to assessment. Two out of the 13 participants report that they have gained more confidence in their ability to make changes and try new things. A number of staff have indicated a desire to be part of stage two of the project.

We have accepted that these small things are encouraging signs of slow and meaningful change. As one of the outcomes of stage one, we recommended that the Head of school take a deep and long term approach to professional development and culture building within the school. We further recommended that if the school wanted to engage in lasting and meaningful change, their priorities should be to challenge beliefs about the purpose of teaching, build a community of learners amongst both staff and students, create opportunities for meaningful communication amongst staff and engage in academic development that is in context. We also recommended that the facilities issue be approached as a collective problem solving project between lecturers, property services and information technology services, all of whom have a direct impact and a stake in the outcome.

We do, however, acknowledge that presenting findings based on what academics say about their teaching practice only tells half the story as Kane, Sandretto & Heath (2002) contend

through their review of research on teaching beliefs and practices “that research that examines only what university teachers say about their practice and does not directly observe what they do is at risk of telling half the story” (p. 1). It is our intention, that future work with academic staff will include more direct observations of practice.

## Conclusion

Stage one of the study has confirmed for us that real change, due to its complexity, takes time. It has highlighted for us the importance of adopting a considered and strategic approach to assisting academic staff to make changes to their teaching practice as well as the need to work collaboratively in a community of teaching practice. Support from the Head of school and Dean, Academic Development has enabled us as academic developers, to use an approach which acknowledges the time needed to allow for deep and effective change to take place. This project has not only clarified our role within the school, but it has more clearly defined our role as academic developers, which is to understand not only the challenges faced by individual lecturers but how the culture within a school or faculty impacts upon their ability to embed sound student learning outcomes in their teaching practice.

Identifying conceptions of teaching was the beginning point of the study and therefore the focus of stage one. In stage two, it is hoped that action can take place based on having identified conceptions of teaching within the school. It is also hoped that opportunities will arise to examine and explore practice by directly observing teachers transform and align, if necessary, their “theories-in-use” with their “espoused theories of action” (Kane, Sandretto & Heath (2002, p. 1). The lecturers involved in stage two of the study will be using the principles of action research over the next two years to make positive changes to their teaching practice, with the intention of refining and making further changes. Our aim is to play the role of ‘critical friend’ (Biggs, 2003, p.68) throughout this process in order to help staff reflect upon their teaching practice as well as their student feedback within a supportive environment (Biggs, 2003). It is anticipated that over time, with the right sort of support, lecturers will be able to shift not only their conceptions of teaching, but their practice as well.

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## References

- Bazeley, P., & Richards, L. (2000). *The NVivo qualitative project book*. London: Sage Publications.
- Biggs, J. (1999). *Teaching for quality learning at university*. UK: SRHE & Open University Press.
- Biggs, J. (2003). *Teaching for quality learning at university* (2<sup>nd</sup> ed). UK: SRHE & Open University Press.
- Burns, R.B. (2000). *Introduction to research methods* (4<sup>th</sup> ed). French’s Forest, NSW: Pearson Education Australia.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research in education: An introduction to theory and methods* (2nd ed.). Boston, MA: Allyn and Bacon.
- Fullan, M. (2001) *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fullan, M. (2003) *Change forces with a vengeance*. London and New York: RoutledgeFalmer.
- Hicks, O. (1999). Integration of central and departmental development - reflections from Australian universities. *The International Journal for Academic Development* 4(1), 43-51.
- Ho, A. (1998). A conceptual change staff development program: Effects as perceived by the participants. *The International Journal for Academic Development*, 3(1), 24-38.

- Ho, A., Watkins, D., & Kelly, M (2001). The conceptual change approach to improving teaching and learning: An evaluation of a Hong Kong staff development programme. *Higher Education*, 42 (2), 143 - 169.
- Kane, R., Sandretto, S., & Heath, C. (2002). Telling half the story: A critical review of research on the teaching beliefs and practices of university academics. *Review of Educational Research*, 72 (2), 177-228.
- Kember, D. (1998) Teaching beliefs and their impact on students' approach to learning. In B. Dart and G. Boulton-Lewis (Eds.) *Teaching and Learning in Higher Education*. Victoria: ACER Press.
- Kember, D., & Kwan, K. (2000). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. *Instructional Science*, 28, 469-490.
- Kember, D. (2000) *Action learning and action research: improving the quality of teaching and learning*. London: Routledge.
- Land, R. (2001). Agency, context and change in academic development. *International Journal for Academic Development*, 6(1), 4-20.
- Martin, E., & Ramsden, P. (1992) *An expanding awareness: how lecturers change their understanding of teaching*. Paper presented at the 1992 HERDSA Conference, Gippsland.
- Ramsden, P. (1988). *Improving Learning: New Perspectives*. London: Kogan Page.
- Ramsden, P. (2003). *Learning to Teach in Higher Education* (2<sup>nd</sup> ed.) London and New York: Routledge
- Reid, A. (2002). *Is there an 'ideal approach to academic development?* Paper presented at the 4<sup>th</sup> ICED International Conference, Perth, Australia, 3-6 July.
- Reid, A., & Petocz, P. (2003). Enhancing Academic Work Through the Synergy Between Teaching and Research. *International Journal for Academic Development*, 8 (1/2), 105-117.
- Reason, P., & Bradbury, H. (2006). *Handbook of Action Research*. London: Sage.
- Trigwell, K., & Prosser, M. (1996). Changing approaches to teaching: A relational perspective. *Studies in Higher Education*, 21 (3), 275-284.
- Trigwell, K., Prosser, M., & Taylor, P. (1994). Qualitative differences in approaches to teaching first year university science. *Higher Education*, 27, 75-84.
- Wenger, E. (1999). *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press

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