

**New perspectives shaping the Higher Education Curriculum as a space for learning.
(0232)****Outline**

This research is an empirical study exploring how academics make curriculum decisions and their perceptions of the influences that shape their decisions. The aim is to better understand the kinds of curriculum that academics are developing in response to the changing higher education context and how they create new spaces for teaching, learning and research. The study took place in a research-intensive university to provide a context where both teaching and research are significant aspects of academics' work to expose the interactions and tensions between them.

Interviews were held with 20 academics from across a range of disciplines and who were both research active and had demonstrated an active interest in teaching and learning. These academics were selected to represent four disciplinary groups; physics, law, arts and environmental studies; and a fifth cross-disciplinary group who were engaged in innovations involving research-led teaching and flexible delivery. Research participants were asked to reflect on how they went about the design of a specific course, and their perceptions of key influences on their decisions, including research.

This study found that most academics make curriculum decisions guided by broad goals for student learning. Interviewees' learning goals expressed five main themes:

- developing students' understandings of a discipline,
- developing students' skills for thinking, learning and research,
- preparing students for future work or life,
- creating personal and/or social relevance for students, and
- designing an effective learning system.

These goals informed academics' curriculum decisions about the selection and organisation of content, teaching, learning and assessment activities. Academics' educational beliefs and perceptions provided a framework from which it was possible to make sense of their curriculum decisions as coherent patterns linking goals and teaching and learning practices. Toohey (1999) identified similar goals and patterns representing five distinctive curriculum approaches in higher education, as did Eisner & Vallance (1974) in relation to school education. While this indicates that higher education curricula are shaped by many enduring beliefs and traditions about education, my study also found that academics are creating new curriculum approaches. These new approaches show that many academics are addressing changing higher education goals and student expectations, and adopting more active and student-centred approaches to teaching and learning. Some trends observed in these newer curriculum approaches are:

- integrated approaches to developing disciplinary knowledge and thinking skills,
- active and inquiry-based learning approaches emphasising personal construction of knowledge,
- multiple ways of linking research and teaching, and
- learning contexts that provide personal and social relevance for students.

Case studies are presented to illustrate these newer curriculum approaches, with some examples below showing academics' thinking as they make curriculum decisions.

(1) Newer discipline based curriculum approaches are emphasising personally constructed knowledge in contrast to the traditional emphasis on transmission of important facts and theories.

For example, in a specialist course on nuclear physics, the course convenor recognised the complexity of the subject matter as an opportunity to expand students' understanding of the discipline and to introduce students to constructing mental models as a conceptual tool.

Nuclear - particle physics is too hard to do theory at the third year level. So particle physics ends up having to be done quite phenomenologically. I knew from the students that they wanted more equations, they wanted more maths ... because that's what they've been taught physics is and then we hit them with nuclear physics and we don't have formulas and so I was trying to find ways of giving the students access into the theoretical side. ... So I wanted them to think about what's your physical model of these interactions, what's going on?

(2) Most courses continue to use a traditional lecture and tutorial format. However there is an increasing use of inquiry teaching and learning approaches to engage students in active learning and to develop a range of sophisticated understandings about the nature of knowledge, learning and research.

For example, in an introductory environmental management course, lectures become panel discussions showcasing contemporary research. The panels are intended to demonstrate to students that knowledge is contested and also provide a context for student inquiry.

The panel discussions were based on the idea that it wasn't just about feeding students information. It was bringing people in and giving them short talks and then allowing students to contextualize what we've just done though asking questions. Coming up with their own questions in groups, and having more time on the student questions than on experts giving their talk.

Students see that there are multiple truths or multiple ways of seeing an issue and many students say that was a light bulb moment. The capacity that the course hopefully gives some students to see that different ways of seeing the world and different disciplines are relevant to understand a problem.

(3) Eighty percent of the academics in the study were able to identify links between their research and teaching that included incorporating their research interests in course topics and lectures, modelling their own approaches to research, and engaging students in inquiry learning and doing research.

For example, in an introductory human ecology course, the convenor is explicitly using research-led teaching for students to learn about research, do research and develop research skills. Research provides a context for students to examine their everyday choices and actions, which represents a critical disciplinary understanding.

Yes I believe that students should do research as part of their studies. So the idea of research-led teaching as both students practising research - developing research skills - as much as it's showing the students my research and that the students' own daily lives are the subject of research enquiry means that the students can research into themselves and learn from what they find, is both human ecological principle and teaching practice.

These case studies reflect a shift in curriculum from the acquisition of knowledge and skills to learning spaces where students are active participants and academics are beginning to conceptualise teaching, learning, inquiry and research along a continuum of curriculum practices.

References

Eisner E. & Vallance E. (1974). *Conflicting Conceptions of Curriculum*. Berkeley, California: McCutchan.

Toohey S. (1999). *Designing Courses for Higher Education*. Buckingham: The Society for Research into Higher Education and Open University Press.