

**Kerri-Lee Krause**

Griffith University, Australia

**Challenging perspectives on learning and teaching in the disciplines: The academic voice  
(0165)**

**Programme number: L11.4**

**Research Domain: Academic Practice, Work and Cultures**

This paper reports on a study of how disciplinary cultures shape academic staff perspectives on pedagogy, curriculum design and skill development. Fifty-five academic staff were interviewed across eight disciplines and four Australian universities. A socio-constructivist epistemological framework informed analysis of academics' views and beliefs about: disciplinary cultures and knowledge; approaches to inducting students into the discipline; and perspectives on generic skills in a disciplinary context. Findings highlight challenges for academic staff seeking to balance their commitment to induct undergraduates into their respective disciplines with such factors as increased student numbers, changing student expectations, sociopolitical changes influencing the differential valuing of knowledge types, and a perceived lack of support for teaching. The paper has implications for policy-makers and academic practitioners as it highlights challenges for understanding the role and purpose of disciplinary knowledge and cultures and their relationship to generic skill development in changing and challenging times.

**Challenging perspectives on learning and teaching in the disciplines:  
The academic voice**

**Outline**

***Introduction and brief literature overview***

Understanding and 'decoding' disciplines (Pace & Middendorf, 2004) is not a new activity in higher education. Yet the value of such activity has taken on renewed importance over the past decade. There are several reasons for this. First, in a near-universal higher education system where students are increasingly unfamiliar with university cultures, the notion of 'discipline' cannot be assumed to be familiar to undergraduate students entering higher education for the first time. Second, curriculum diversification in western higher education is emerging as a key point of differentiation among universities in a competitive market environment. Universities are pursuing distinctiveness and the 'competitive edge' in the sector. Curriculum has emerged as one of the key factors in the race to establish distinctiveness. The marketisation of higher education and the employability agenda represent another important reason to examine key higher education challenges through a disciplinary lens. The imperative to produce 'work-ready' graduates for a knowledge economy, and curriculum diversification, reform and renewal bring with them a range of challenges. These include such questions as: what do we want students to know as a result of studying in this discipline?; what core elements of the disciplines do we need to retain? what balance should be struck between generic and discipline-based skills, and who decides?; and what compromises might need to be made to traditional disciplinary approaches to achieve maximum flexibility and optimal graduate outcomes for students?

Becher (1989) showed how differing beliefs about the nature and purposes of knowledge give rise to deep-rooted differences between the disciplines in their traditions of research. Kreber and colleagues (2008) extend the exploration in this field, examining disciplinary differences and transdisciplinarity in the context of broader social and political imperatives to equip graduates with employability skills. The full paper will examine more fully the implications of academics' epistemological beliefs for curriculum design and pedagogy in the discipline (Fanghanel, 2007), emerging scholarship on graduate attributes (Barrie, 2006; Bath, Smith, Stein & Swann, 2004) and the challenges of preparing students with generic skills in disciplinary contexts.

### ***Study approach and conceptual framework***

This paper reports on selected findings from a study examining how different disciplinary cultures shape the approaches and practices of teachers and students. The study is based on the hypothesis that fundamental epistemological differences give rise to marked disciplinary contrasts in the norms and practices of day-to-day teaching, learning, assessment and curriculum design (Hofer, 2006; Lee, 2008; Niessen et al, 2008). The objective was to build a detailed picture of the 'world view' that permeates and defines the culture of a range of disciplines in relation to how students learn in that field and therefore how they are taught. A socio-constructivist epistemological framework (Trowler, 2008) underpinned the analysis and interpretation of the findings, recognising the import of contextual factors in shaping academics' views and beliefs about knowledge in the discipline.

While the broader study included interviews with students and academic staff, this paper reports on selected responses from staff, focussing particularly on two of the six key themes of the study; namely, teaching culture of the discipline and perspectives on the challenge of generic skill development in a range of disciplines. Fifty-five academic staff were interviewed in four universities: 35 staff in four 'traditional' disciplines (e.g., Philosophy, Chemistry); and 20 staff in newer fields (e.g., Tourism, Physiotherapy). Students were also interviewed, but this lies beyond the scope of the paper.

### ***Indicative findings and implications***

Two themes arising from the data are explored in this paper. The first relates to academic staff views on the teaching culture in their discipline and the extent to which a disciplinary community or 'tribe' exists when it comes to issues of pedagogy and curriculum design. The second theme examines academic views on the development of generic skills in disciplinary contexts.

#### ***Theme 1: Perspectives on teaching in the disciplines***

Across disciplines and university types, there was relative unanimity in the nature of responses to the question of whether interviewees perceived themselves as part of a disciplinary teaching community with whom they could share views about teaching and learning. Overwhelmingly, academic staff across genders, ages and levels of experience expressed the view that they rarely if ever discussed their teaching or curriculum design with colleagues: 'it's just a task that we perform'. A small number of interviewees referred to 'talking on an informal basis but on the whole, the message was that research

discussions overwhelmingly superceded those about teaching in their discipline: 'promotion is about research ... that's the way the place is run'. When it comes to sharing ideas about teaching and curriculum design in the discipline, it seems – to extend the Becher metaphor – that these academics are more like academic nomads than academic tribe members. They note limited evidence of encouragement from peers, departments or institutions to invest time in teaching or teaching-related discussions. The challenge of academic isolation was clearly evident.

### ***Theme 2: The role of generic skills and graduate attributes in the disciplines***

Views about the relative importance of a range of generic skills varied considerably across the eight discipline groups. The content and frequency of responses was analysed using a rating scale ranging from 'essential' to 'not relevant'. Six generic skills common to most universities were examined. These included critical thinking, problem solving and ability to work as a team member. Several interviewees expressed frustration at the lack of clarity in the meaning of these commonly used terms. Some indicated that 'all are important', while others distinguished between the relative importance of these generic skills in their discipline.

Academic staff across all disciplines identified critical thinking skills as 'essential' or 'important' in their field. Only one mathematician said it was not a relevant skill. This was the only one of six generic skills on which there was such agreement. The newer, more applied disciplines in the sample (e.g., Engineering and Tourism) emphasised the importance of consulting with industry partners about what they were looking for in graduates. This was not mentioned by any academics in the more traditional disciplines sampled. Team work emerged as one of the greatest sources of variation among the disciplinary respondents. No interviewee in the traditional disciplines mentioned team work as essential. On the other hand, only one of the twenty academics in the newer disciplines identified team work in this way. The full paper will highlight patterns of responses and their implications for policy and practice.

In most cases, when academic staff interviewees rated a generic skill as 'not relevant' they acknowledged that 'some other discipline' may be responsible for addressing that skill, but that it did not happen in their discipline. In other words, there is considerable variability in the extent to which academic staff in different disciplines perceive the development of generic skills to be their responsibility in a disciplinary context.

### **Concluding remarks**

There is much to learn from examining academic staff perceptions of how and what students learn and should learn in disciplinary settings. More remains to be done in comparing these perceptions with the growing imperative for universities to contribute in practical ways to the development of students' employability skills (Yorke, 2008). Reconciling potential discrepancies between these two areas of activity represents a significant challenge for the sector. If, as these findings suggest, academic staff feel more like nomads than tribal members when it comes to teaching in their discipline, arguably they

have limited avenues for informed debate on the issue of meaningfully embedding generic skills and graduate attributes in disciplinary contexts (see Kreber, 2008). This has implications for academic development programs as well as institutional and departmental policy and practice. Is it possible that a situation is emerging where we have a hierarchy of disciplines, with some shouldering greater responsibility for student employability than others? Does this matter? What opportunities do academics have to explore these questions within and across disciplinary boundaries? Further discussion of these issues in light of a fuller exploration of the study's themes will be elaborated in the full paper.

## References

- Barrie, S (2006). Understanding what we mean by the generic attributes of graduates. *Higher Education*, 51, 215-241.
- Bath, D., Smith, C., Stein, S., & Swann, R. (2004). Beyond mapping and embedding graduate attributes: Bringing together quality assurance and action learning to create a validated and living curriculum. *Higher Education Research and Development*, 23(3), 313-328.
- Becher, T. (1989). *Academic tribes and territories*. Buckingham: Open University Press.
- Fanghanel, J. (2007). Investigating university lecturers' pedagogical constructs in the working context. York: The Higher Education Academy. Retrieved June 8, 2009, from <http://www.heacademy.ac.uk/assets/York/documents/ourwork/research/fanghanel.pdf>
- Hofer, B. K. (2006). Domain specificity of personal epistemology: Resolved questions, persistent issues, new models. *International Journal of Educational Research*, 45, 85-95.
- Kreber, C. (Ed.). (2008). *The university and its disciplines: Teaching and learning within and beyond disciplinary boundaries*. London: Routledge.
- Lee, J. (2008). The shaping of the departmental culture: Measuring the relative influences of the institution and discipline. *Journal of Higher Education Policy and Management*, 29(1), 41-55.
- Niessen, T., Abma, T., Widdershoven, G., van der Vleuten, C., & Akkerman, S. (2008). Contemporary epistemological research in education: Reconciliation and reconceptualization of the field. *Theory and Psychology*, 18(1), 27-45.
- Pace, D., & Middendorf, J. (Eds.). (2004). *Decoding the disciplines: Helping students learn disciplinary ways of thinking*. San Francisco: Wiley.
- Trowler, P. (2008). Beyond epistemological essentialism: Academic tribes in the twenty-first century. In C. Kreber (Ed.), *The university and its disciplines: Teaching and learning within and beyond disciplinary boundaries* (pp. 181-195). London: Routledge.
- Yorke, M. (2008). Assessment for career and citizenship. In C. Kreber (Ed.), *The university and its disciplines: Teaching and learning within and beyond disciplinary boundaries* (pp. 221-230). London: Routledge.

**Acknowledgements:**

This study was funded by the Australian Research Council Discovery Project Scheme. Project chief investigators were Professor Richard James (CSHE, University of Melbourne) and Professor Kerri-Lee Krause (GIHE, Griffith University). Several colleagues have contributed to this project. Key contributors were: Associate Professor Gay Baldwin, Robyn Garnett, Dr Anna Jones (all from the University of Melbourne); and Associate Professor Sharon Parry (University of Southern Cross). We gratefully acknowledge the student and academic staff interviewees who have made this project possible.