

## Improving teaching: Enhancing ways of being university teachers

GLORIA DALL'ALBA

*The University of Queensland*

### Abstract

My aim in this paper is to theorise my teaching in a course for experienced university teachers, in a context of increased attention to such courses. My focus in the course is transforming and enhancing ways of being university teachers, through integrating knowing, acting and being. In other words, epistemology is not seen as an end in itself, but is in the service of ontology. In the paper, I explore and illustrate how this focus on ontology is enacted in the course.

Teaching is more difficult than learning because what teaching calls for is this: to let learn. (Heidegger, 1968, p. 15)

### Introduction

In a context of increased attention to educational qualifications for university teachers, I outline my approach to a course for experienced university teachers, which I have taught at the University of Queensland (UQ) since 2003. For more than a decade, the course has been offered part-time over one year by the UQ School of Education. On successfully completing the course, participants are awarded a Graduate Certificate in Education (Higher Education).

There are typically 15 to 25 participants, including one or two from other universities. They come from a broad variety of academic disciplines, including the humanities, engineering, and biological, physical, social and health sciences. Their levels of appointment range from experienced lecturers and librarians to associate professors. Participants include those who choose to enrol for professional development or contribution to promotion, while approximately one-third identify themselves as required to participate to improve their teaching.

In semester 1 of the course, in parallel with exposure to the educational research literature and critical analysis of their own practice, participants design an educational intervention to enhance their teaching in the form of an action learning project. They implement and evaluate

Address for correspondence: School of Education, The University of Queensland, Brisbane Qld 4072, Australia.  
Email: g.dallalba@uq.edu.au

Published in *Higher Education Research and Development*, 2005, 24(4), 361-372  
[http://www.tandfonline.com/toc/cher20/current#.U4g4zC\\_ekzU](http://www.tandfonline.com/toc/cher20/current#.U4g4zC_ekzU)

this project during semester 2 (working in two groups with different facilitators). Although the course can be taken externally, most participants work in mixed mode format, including fortnightly evening seminar/workshops, individual study modules, whole-day weekend classes, online discussions, and action learning projects.

In theorising my teaching in this course, I explore my focus on transforming and enhancing both the way in which participants understand what it is to be university teachers and their educational practice. I describe some ways in which this focus is evident in the course, as well as illustrating with comments by course participants from 2004.

### **Epistemology in the Service of Ontology**

While participants value their exposure to new ideas and strategies relating to how to teach, the course does not primarily provide a toolkit for university teaching. It aims to extend well beyond teaching techniques. Not only is epistemology (or theory of knowing) addressed, but also ontology (or theory of being). This means the course not only interrogates and enhances what we know about university teaching, but it does so as a means of challenging and transforming ways of being university teachers (broadly construed). So, epistemology is not seen as an end in itself, but is in the service of ontology. In a report at the end of the course, one participant playfully noted the emphasis on ontology, as follows:

Certainly there has been both formal and informal learning in the Grad Cert Program. The informal learning has come through being (yes, *being*) involved in the projects of others ... and in having [colleague's name] as a Critical Friend for my own project.

Why emphasise ontology in the sense of not only what we know and can do, but who we are? Such an emphasis is at odds with a predominant focus on epistemology – in the form of knowledge and skills – within higher education programs (Barnett 2004, in preparation; Dall'Alba & Barnacle, 2004, in press; Heidegger, 1998/1967; Thomson, 2001), including courses on university teaching. Martin Heidegger (1998/1967) points out that lack of attention to ontology has meant we “increasingly instrumentalize, professionalize, vocationalize, corporatize, and ultimately *technologize* education” (Thomson, 2001, p. 244, emphasis in original; see Davies (2003) for additional analysis of the trend to technologise universities). This trend is evident in throughput measures such as course completions; reduction of teaching, research and scholarship to readily measurable outcomes; discourse about the export value of universities; dependence of university funding upon continual efficiency measures; and increased bureaucratisation of universities. While this trend devalues what we know and can do, it overlooks who we are – as university teachers, for instance.

While the technologised state of higher education can be diagnosed as an ontological problem, a more central point for my argument here is that a focus on epistemology at the expense of ontology falls short of what higher education programs can, and are expected to, achieve (see also Heidegger, 1998/1967 and Barnett, 1997, 2004, in preparation). For example, if we consider the transformation expected during transitions from student to doctor, economist, engineer, teacher and so on, it becomes apparent that knowledge and skills are not sufficient, in themselves. Knowledge and skills acquisition does not ensure skilful practice. This is not to deny the importance of knowledge and skills but, rather, to argue that

their acquisition is insufficient for enacting skilful practice and for transformation of the self that achieving such practice inevitably involves. By focusing on epistemology, we fail to facilitate and support this transformation.

What does it mean, then, to direct attention to ontology by focusing on enhancing ways of being university teachers? In order to address this question, I explore teaching, knowing, and learning as they relate to the course. First, teaching involves a relation among learner(s), teacher(s), and what is learned, with the purpose of promoting and facilitating learning (see Dall’Alba & Sandberg (1996) for elaboration). Responsibility for learning is shared by learner(s) and teacher(s) (if we treat these as separate categories or roles, for the purpose of analysis). University teaching includes, then, the design of sequences of learning activities (for instance, a course component or course) that bring forth a desire to learn, promotion of learning in face-to-face and/or technology-mediated formats, assessment of student achievement, and evaluation for improvement of educational practice. These aspects of teaching are included in the course.

Given this notion of teaching, a principal feature of enhancing ways of being university teachers relates to the way in which knowledge is understood. Debates about epistemology in the research literature (e.g., Gibbons et al, 1994; Grosz, 1995; Lave, 1993; Schön, 1983) have challenged an understanding of knowledge as absolute and foundational, arguing instead for a pluralisation of knowledges situated within various contexts. It follows, then, that no one form or site of knowledge has privileged status. Within the course, for instance, we can come to know through encounters with the research literature, discussions with colleagues, and critical reflection on educational practice. These various forms and sites of knowing all contribute to enhancing our teaching.

Understanding knowledges in this way calls into question a conventional notion of knowledge transfer or acquisition, in which authoritative knowledge is transferred or acquired while remaining unchanged. Rather, knowledges become contextualised and transformed across contexts, so there can be no uncontested ‘body of knowledge.’ A further implication is that knowledge or, more accurately, knowing is not exclusively cognitive, but is created, enacted and embodied (Billett, 2001; Bresler, 2004; Dall’Alba, 2004; Dall’Alba & Barnacle, 2004; Dall’Alba & Barnacle, in press; Mol, 2002; Schön, 1983). This means that knowing is not simply something we possess, but who we are. As Iain Thomson notes, with reference to Martin Heidegger’s work:

Our very ‘being-in-the-world’ is shaped by the knowledge we pursue, uncover, and embody. [There is] a troubling sense in which it seems that we cannot help practicing what we know, since we are ‘always already’ implicitly shaped by our guiding metaphysical presuppositions. (2001, p. 250)

The notion of knowing as created, enacted, and embodied is discussed in the course as it relates to student learning, so that *what* (is learned) and *how* (the course facilitates this learning) are consistent.

These pluralist, contextualised, active, ontological qualities of knowing mean that I, as university teacher, cannot simply transfer knowledge about teaching to course participants. Instead, they create, enact, and embody the knowledges they encounter through the course to varying extents and in a range of ways, both individual and shared. In the process, they are

transformed, to greater or lesser extent, as university teachers. For example, course participants analyse assessment in one of their own courses using the research literature, while considering the strong messages that assessment gives students. This process creates heightened awareness of consequences of assessment practices, which participants then incorporate into their courses in various ways. Their heightened awareness means changes they make relate not only to how they assess students, but also contribute to transforming their embodied understanding of being university teachers.

A notion of knowing as created, enacted and embodied means that learning in the course is not confined to the heads of individuals, but is concerned with integrating ways of knowing, acting, and being university teachers. Learning of this kind does not primarily involve acquisition of information, as argued above. Nor does it simply imply learning by doing. As Pirkko Markula argues, “the engagement in bodily practices or promotion of bodily practices does not alone guarantee the construction of an embodied subjectivity” (2004, p. 74). Instead, learning in the course involves transformation of the self in relation to the social practice that is university teaching.

This transformation does not take the form of social engineering towards a specific ‘product.’ Nor can it be reduced to a set of skills to be used in the classroom. As Nigel Blake and colleagues (2000) argue, reducing teaching to ‘skills’ or ‘competencies’ overlooks the engagement, commitment and risk entailed in this important enterprise. They explain that “what are commonly called skills are not activities to which we give anything of *ourselves*” (p. 26; emphasis in original). In other words, by reducing teaching to skills, ontology is not addressed. In contrast, Martin Heidegger (1998/1967; 1968) and Ronald Barnett (1997; 2004; in preparation) argue for heightened attention to ontology as a way forward for higher education. Highlighting ontology in the course on teaching means placing emphasis on enhancing ways of being university teachers.

### **The Pedagogical Relationship**

It follows from the notions of teaching, knowing, and learning outlined above that the pedagogical relationship is critically important in the course. Given the extensive collective experience among course participants (see Introduction), I regard a conventional student-teacher model as inappropriate. In challenging such a model, Robert Gardner cautions about “how hard it is to teach without sliding into views that exaggerate both one’s own knowledge and one’s students lack of” knowledge (1994, p. 81). Martin Heidegger extends this point when he highlights the central task and challenge of teaching:

Teaching is even more difficult than learning. We know that; but we rarely think about it. And why is teaching more difficult than learning? Not because the teacher must have a larger store of information, and have it always ready. Teaching is more difficult than learning because what teaching calls for is this: to let learn. The real teacher, in fact, lets nothing else be learned than—learning. His conduct, therefore, often produces the impression that we properly learn nothing from him, if by ‘learning’ we now suddenly understand merely the procurement of useful information. The teacher is ahead of his apprentices in this alone, that he has still far more to learn than they—he has to learn to let them learn. (1968, p. 15)

When I teach the course, I am acutely aware of the wealth of knowledge and experience of university teaching among participants. This experience is a rich resource that is drawn upon throughout the course. For example, when considering the challenge of student diversity, we

explore ways in which participants address this issue in their courses. In addition, through the varied experience of participants, we encounter dimensions of university teaching across settings. For instance, in discussing the forms assessment can take from large cohorts of first year students to individuals working with someone who is ill, our understanding of student assessment is broadened.

Against the background of this wealth of experience, I see the course as a form of collaboration among colleagues in which we all learn, in contrast to a conventional student-teacher model. Active involvement of participants through collaboration is necessary to “let them learn.” This means that a pedagogical relationship, whose purpose is to facilitate learning, is established between teacher and course participants, as well as among participants themselves. As noted above (see Epistemology in the Service of Ontology), knowledge can be gained in several ways and from a range of sources, including other participants.

Most course participants respond enthusiastically to the active, collaborative role demanded of them. However, a small minority seek instead to defer to ‘the teacher as authority’. While I am explicit about my own understandings, I encourage participants to develop an informed position on the ideas and practices they encounter in the course, not simply to defer to ‘the teacher as authority’. This is where I occasionally encounter some resistance. (Lawson et al. (1997) report similar experiences in courses adopting an action learning approach, although resistance might be expected whenever we deviate from a conventional student-teacher model.) The stance or role I should adopt in the course is often debated among participants, providing an additional opportunity to critique a conventional model.

Despite initial resistance from a few participants, the collaboration encouraged during the course continues afterwards. For instance, three previous course participants are currently providing me with comments on a draft paper. Some course participants from 2004 now teach in each other’s courses across discipline areas, as well as writing interdisciplinary papers on educational issues for journal publication. Six participants are collaborating on enhancing teamwork among students after the following email from a participant early in 2005:

Hi all (and happy new year),

[Name of colleague] and i are putting together a team strategies manual and have decided to run a critical friends trial this coming semester. This involves you trialling some or all of my ALP [action learning project] strategies within a course that requires students to work in teams, and reporting back via a couple of debriefing sessions so that i can refine and improve the methods.

Although I see the course as collaboration, my position is clearly not identical to that of course participants. They have enrolled in a course that I teach, drawing upon educational research literature with which most participants are not familiar on entry to the course. In addition, I assess them on work they produce towards attaining a formal qualification. Although this qualification is outside their principal subject and research expertise, the university expects them to be skilful teachers. This expectation, especially when combined with the student status they are attributed by the institution on enrolment in the course, presents a dilemma for some participants.

One of the challenges for me is to deal constructively with the mixed roles of teacher and student that participants are likely to experience. One means of doing this is to question the conventional student role many have experienced, especially during undergraduate studies. In addition, I promote an environment where it is acceptable for them to acknowledge strengths and limitations of their own teaching, as well as mine. In this way, an apparent gap between their roles as student and experienced university teacher can be bridged or narrowed, although this takes time.

Throughout the course, to some extent, we grapple with their mixed roles as student and teacher as well as the related issue of my relationship to participants. These relationships are brought into sharp focus when work is submitted for assessment (see also Lawson et al. (1997); Leach et al. (2001)). One means for promoting collaboration, while calling into question a conventional student-teacher model, is peer assessment of the first piece of assessable work, where each participant receives written feedback and a grade from another participant and from me. Another strategy is a requirement that participants actively participate throughout the course, critically interrogating, clarifying, and developing their ways of being university teachers, as I discuss below.

### **Integrating Knowing, Acting and Being**

A principal means of enhancing ways of being university teachers is through reflexivity. As Martin Heidegger pointed out, transformation of the self can be achieved by “removing human beings from the region where they first encounter things and transferring and accustoming them to another realm where beings appear” (1998/1967, p. 167). Iain Thomson highlights the purpose: “to bring us full circle back to ourselves, first by turning us away from the world in which we are most immediately immersed, then by turning us back to this world in a more reflexive way” (2001, p. 254). In other words, when the familiar is made unfamiliar, we can facilitate transformation of the self. We do this in the course by examining our teaching anew, drawing upon the research literature, the experience of our colleagues, and critical reflection on our practice. When we examine our teaching anew in this way, we can contribute to transforming our ways of being university teachers, as discussed below.

Given that transforming the self is ontological, it involves integrating knowing, acting and being (see also Dall’Alba & Barnacle, 2004; in press). Several strategies are used to achieve this integration in the course, as we reflexively examine our teaching. These include: promoting participation in a community with a commitment to student learning; dialogue about our educational practice, including changes to that practice; interrogating our teaching with reference to the educational literature; modelling of teaching; and action learning projects.

Participation in a community that has a commitment to enhancing the quality of student learning is a deliberate feature of the course, which is valued by participants:

The network established between the participants of [course code] including the mentor scheme is invaluable. Becoming more or less involved in so many different ALPs of interest for my own teaching has given me new perspectives and ideas. It also has lowered boundaries to other academics regarding discussions of educational questions.

As this course participant notes, participating in such a community brings exposure to “new perspectives and ideas”, as well as providing a language and confidence to discuss educational questions outside the course. In addition, this community provides support for trying new ideas, as illustrated below. Reflexively interrogating and enhancing teaching in collaboration with others transforms ways of being university teachers, as the previous quote from Martin Heidegger indicates. We develop our ways of being university teachers, then, within the social practice that is university teaching. Participation in this community continues after the course (see *The Pedagogical Relationship*), so that it contributes to building a critical mass of people committed to promoting student learning within the institution.

A central part of participating in this community during the course is engaging in reflexive dialogue about our practice in classes and online discussions. Through these dialogues, course participants serve as a rich resource for each other, as noted previously (see *The Pedagogical Relationship*). The dialogues deal with participants’ responses to the course or specific classes, the educational literature, issues arising from educational practice, and ideas being implemented in teaching or courses. A participant, whose main employment is outside the university but who was teaching an undergraduate course part-time, made the following contribution to an online discussion:

My first "Information Security" lecture for the semester was on Monday. I arranged with a friend from work to give the first few minutes of the lecture, presenting some slides that walked students through the course profile. He opened with "My name is [lecturer's name]...", and pretended to be me. It wasn't until about 20 minutes later that I walked in, apologised for being late, and introduced myself, and "didn't realise" that anything had already happened in the class. My opening was to ask what people thought the issues of trust and identity were about. It's interesting (looking back at the videotape I made) to see the 2-3 second delay before the laughter started. A colleague here in [name of UQ School] (who did Grad Cert Ed 8 years ago, incidentally) has just reported to me today that he'd heard "really really superb" feedback from students. I'm yet to see just how much they will actually "learn" from the experience.

It can be noted, however, that attempts to innovate may not succeed and can meet with resistance, especially if students have not been adequately prepared for the changes. In online discussions and classes during the course, participants seek feedback on how they can improve initiatives that have not worked as well as they hoped.

Another strategy for integrating knowing, acting, and being university teachers is promoting reflexivity through the educational literature, which extends participation in a community committed to student learning beyond the institution. For instance, participants are alerted to a range of approaches to teaching and learning within universities, including a transmission model, constructivism (based on Piaget, 1953, 1971 and Vygotsky, 1962; 1978), and social construction (derived from phenomenology; see Berger & Luckmann, 1966). The purpose of this exposure to alternative approaches is to promote critical reflection upon, and clarification of, participants’ own understanding of teaching, particularly as these understandings are embodied in their educational practice. For instance, I used the following exercise on models of teaching and learning in the course in 2004:

Which of these models [above] do/will your students experience in the course(s) you are teaching or designing?

Document the ways in which one or more of these models are apparent in one of your courses.

For many course participants, exposure to the vast educational literature, including research related to teaching and learning within their own fields, is an unexpected benefit. During the course, participants use this literature to critically analyse, and make improvements within, their own teaching/learning contexts. One course participant noted the value of this exposure and its relevance to teaching practice, as follows:

One of the outstanding gains of this course and [action learning] project has been the development of my awareness of literature which supports and encourages change in teaching practices. This literature serves not only to justify the actions I may wish to implement but also serves as a source of many ideas for change. By putting some of those ideas into practice during this year I have recognised the potential effectiveness of what appear to be relatively minor changes in teaching practice in enhancing student learning outcomes, and how those effects can spread both amongst the student group and across the length of the course. Furthermore I have witnessed how the effects of those changes can expand into subsequent courses those students undertake. This has clearly demonstrated to me how good (or bad) teaching practice can impact on our students and emphasised the responsibility we as academics have to aim for the best possible teaching practice to improve the students experience of learning.

This quote illustrates that the course enables participants to integrate what they learn from the literature with their teaching practice, thereby enhancing what it means to be a university teacher, including awareness of the responsibilities involved. As part of this process, many participants experience a renewed capacity to effect change, as the quote above illustrates.

In addition to promoting reflexivity through the literature and participation in a community, in teaching the course I inevitably enact particular ways of being a university teacher. In doing so, I model a range of ways of teaching, including: clarifying the requirements of the course; providing an environment for participants to raise questions and discuss efforts to improve their teaching; critiquing higher education policy at local and international levels; designing learning activities in a range of formats (e.g., individual, small group, whole group, discussion, reflective exercises, analysis of course documents and teaching practice, and so on); encouraging participants to respond to each others' queries and ideas; explaining educational theory encountered in the course; providing constructive comments on written work; and seeking feedback on participants' experiences within the course. As I enact these ways of teaching, participants encounter ways of being a university teacher that they can compare with themselves and with the literature. They have noted that their repertoire of teaching strategies and learning activities is broadened through experiencing my teaching.

As a further strategy for integrating knowing, acting, and being, each participant designs, implements and evaluates an educational intervention to enhance some aspect(s) of their educational practice. This process occurs in collaboration with other course participants in the form of an action learning project (e.g., Walker, 2001; Zuber-Skeritt, 1996). So, participants are challenged to transform their ways of being university teachers through transforming their knowing and acting. In an action learning project report, a course participant notes that the strategies outlined above have contributed to this transformation:

This year has been both an interesting and surprising journey for me ... and learning about educational practice, the educational literature and my own teaching practice has been a revelation. My idea of what constitutes a teacher has been substantially altered, but at the same time I feel that much that I felt to be intuitively right has been vindicated... More importantly by far, however, I feel the course has had a profound effect on my own teaching practice... In a more practical sense this year has taught me how to implement and evaluate changes in my teaching in a useful way... The network of colleagues created by



the course has also provided me with an invaluable resource... In conclusion, while I realise that I am a relative novice with respect to educational practice, I feel that the background provided by this course has provided me with a solid foundation for further development. I now feel I have no option but to consciously reflect on what I do as a teacher and as a learner in order to improve both these aspects of my professional practice as a “lecturer”.

While transformation of the self can be liberating and empowering, it is often fraught with uncertainty and some degree of anxiety. For example, when a transmission model of teaching is called into question during the course, some participants can be excited and troubled by new possibilities for their educational practice. A challenge in the course is to both facilitate and support transformation in ways of being university teachers. As noted previously, our knowing is not simply a cognitive acquisition, but who we are (see Epistemology in the Service of Ontology). For instance, emphasising transmission of information in teaching reflects not only our knowing and what we do, but also who we are as teachers.

When transforming teaching is experienced as potentially undermining the self or familiar ways of teaching, it can elicit resistance or defensiveness. As Glenn Gray notes, with reference to Heidegger’s work: “There is always a struggle to advance a new way of seeing things because customary ways and preconceptions about it stand in the way” (1968, p. xxi). Similarly, one course participant made the following reflection during an online discussion:

Maybe I am stuck in the opposite of the transmission model — a selfish reception model — and feel most productive when stuff is going in, rather than when I'm being active. I suppose that there's some sort of learned reluctance to get involved during the learning process. Maybe that's something that we have to try to overcome in our teaching if we want our classes to learn actively.

The uncertainty and resistance experienced by course participants also relates to their mixed role of being experienced teacher and student (see The Pedagogical Relationship):

hey — don't get the idea that I want to just get Gloria to tell us what she wants... I hope I am a bit above that... hmpf... I keep feeling like a student — and strangely — have no sympathy for myself!!!

One means of dealing with resistance or defensiveness is to encourage a shift towards openness to new ideas about teaching, while also supporting those undergoing a transformation in their ways of being university teachers. Carefully selected literature and discussion can provide a rationale for change and exposure to new ideas. The course participant quoted above on reluctance to learn actively also made the following remark on another occasion, demonstrating openness to new ideas with an emphasis on student learning:

I appreciate the discussion of rather radical approaches to assessment. It certainly gives me confidence to make changes in that area. I had felt uneasy about adopting assessment techniques that could potentially be unpopular with the students; but now I will weight that criterion much lower and consider more explicitly the actual learning outcomes, opportunities for feedback, and motivation that the assessment technique can provide.

When resistance or defensiveness occurs, course participants are a rich resource for each other in demonstrating openness to unfamiliar ideas and activities they are prepared to try in their classes. Given my own teaching is on display as I attempt to promote learning about teaching, there is also potential for me to become defensive about what I do. On the other

hand, this situation presents an opportunity to demonstrate the kind of openness towards teaching that the course encourages. In the report of an action learning project demonstrating openness to learning about teaching, a course participant reflected, as follows:

Before the course I was highly sceptical of the benefit, if any, that could be provided to me by using an educational framework to inform my teaching practice... If I had to say in one phrase what the main benefit of the course has been to me, it has been to provide a “conceptual/practical framework from which I can reflect and improve my teaching practice in an ordered and structured manner”... Completion of the course has left me with now an understanding of what Frank McCourt meant when he said: “*If you aren't learning while you're teaching, you aren't teaching.*” (emphasis in original)

## Conclusion

My aim in this paper has been to theorise my teaching in a course for experienced university teachers. As described in the paper, my focus in the course is enhancing and transforming ways of being university teachers. This involves placing emphasis on ontology, while also addressing epistemology. This emphasis can be achieved by integrating knowing, acting, and being, as discussed in the paper. The course is successful, then, when it enables participants to integrate enhanced knowing about teaching, breadth in what they can do when they teach, and who they are as university teachers. An essential aspect of this integration is continuing to be reflexive about teaching practice as the contexts in which we teach change.

## Acknowledgements

Early in my academic career, John Bowden was Head of Department in one of the most dynamic and constructive departments in which I have worked. The space and opportunities he created for dialogue, critical examination of ideas, and enacting knowledge have contributed to making this paper possible. I gratefully acknowledge engaging and challenging debates with John in subsequent years, as well as invaluable mentoring and support. John's enthusiastic involvement with, and commitment to, professional development among university teachers remains an inspiration.

For thoughtful comments on an earlier version of this paper, I am indebted to Gary Dykes, Jörgen Sandberg, and anonymous reviewers. Many other colleagues, including research students and university teachers outside the field of education, have engaged in dialogue with me that has developed and refined the ideas presented here. Finally, I warmly thank graduates from the course who allowed me to quote them. Their enthusiasm, commitment, and passion for teaching has brought my text to life, eloquently demonstrating that teaching is not only what we know and do, but who we are.

## References

- Barnett, R. (1997). *Higher education: A critical business*. Buckingham: SRHE & Open University Press.
- Barnett, R. (2004). Learning for an unknown future. *Higher Education Research and Development*, 23, 247-260.

- Barnett, R. (in preparation). Recapturing the universal in the university.
- Berger, P.L. & Luckmann, T. (1966). *The social construction of reality*. Harmondsworth: Penguin.
- Billett, S. (2001). Knowing in practice: Reconceptualising vocational expertise. *Learning and Instruction*, 11, 431 -452.
- Blake, N., Smeyers, P., Smith, R., & Standish, P. (2000). *Education in an age of nihilism*. London: Routledge Falmer.
- Bresler, L. (Ed) (2004). *Knowing bodies: Moving minds*. Dordrecht: Kluwer Academic Publishers.
- Dall'Alba, G. (2004). Understanding professional practice: Investigations before and after an educational programme. *Studies in Higher Education*, 29, 679-692.
- Dall'Alba, G. & Barnacle, R. (2004). Embodied knowing in higher education. Paper presented at the annual conference of the Australian Association for Research in Education, Melbourne.
- Dall'Alba, G. & Barnacle, R. (in press). Embodied knowing in online environments. *Educational Philosophy and Theory*.
- Dall'Alba, G. & Sandberg, J. (1996). Educating for competence in professional practice, *Instructional Science*, 24, 411-437.
- Davies, B. (2003). Death to critique and dissent? The policies and practices of new managerialism and of 'evidence-based practice'. *Gender and Education*, 15, 91-103.
- Gardner, M.R. (1994). *On trying to teach: The mind in correspondence*. Hillsdale, NJ: Analytic Press.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage.
- Gray, J.G. (1968). Introduction. In M. Heidegger, *What is called thinking?* New York: Harper & Row.
- Grosz, E. (1995). *Space time and perversion: The politics of bodies*. New York: Routledge.
- Heidegger, M. (1968). *What is called thinking?* Trans. F.D. Wieck and J.G. Gray. New York: Harper Row.

- Heidegger, M. (1998/1967). Plato's doctrine of truth. Trans. T. Sheehan. In W. McNeill (Ed.), *Pathmarks* (p. 155-182). Cambridge: Cambridge University Press.
- Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (pp. 3-32). Cambridge: Cambridge University Press.
- Lawson, J., Beaty, L. Bourner, T. & O'Hara, S. (1997). Action learning comes of age – part 4: Where and when? *Education + Training*, 39, 225-229.
- Leach, L., Neutze, G., & Zepke, N. (2001). Assessment and empowerment: Some critical questions. *Assessment and Evaluation in Higher Education*, 26, 293-305.
- Markula, P. (2004). Embodied movement knowledge in fitness and exercise education. In L. Bresler (Ed.), *Knowing bodies: Moving minds* (pp. 61-76). Dordrecht: Kluwer Academic Publishers.
- Mol, A. (2002). *The body multiple: Ontology in medical practice*. Durham: Duke University Press.
- Piaget, J. (1953). *The origin of intelligence in the child*. London: Routledge.
- Piaget, J. (1971). *Psychology and epistemology*. New York: Grossman.
- Schön, D.A. (1983) *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Thomson, I. (2001). Heidegger on ontological education, or: How we become what we are. *Inquiry*, 44, 243-268.
- Vygotsky, L.S. (1962). *Thought and language*. Trans. E. Hanfmann and G. Vakai. Cambridge, Mass: MIT Press.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Walker, M. (Ed.) (2001). *Reconstructing professionalism in university teaching: Teachers and learners in action*. Buckingham: SRHE & Open University Press.
- Zuber-Skerritt, O. (1996). *Action research in higher education: Examples and reflections*. London: Kogan Page.