Teacher talk: Flexible delivery and academics' praxis in an Australian university

Abstract: This article reveals how a university-wide decision to implement flexible delivery at an Australian regional university stimulated academics' praxis in the form of committed, collaborative inquiry into teaching practice, and students' learning. This inquiry took the form of deliberately developed conversations amongst academics about their teaching practices. The article reports the discussions of a group of seven Education academics who met regularly over a six month period to better understand, with a view to improving, their teaching practices in the context of the introduction of a new e-technology platform at their university. Analysis of detailed transcripts of semi-structured meetings of the group suggests considerable evidence of praxis amongst members. This was evident in the way participants interacted with one another in their efforts to interrogate what flexible learning meant, their response to the change process instigated by the move to flexible delivery, and their critique of the usefulness of information and communication technologies for teaching practice and student learning. The findings validate collaborative inquiry approaches as a form of praxis in university settings.

Keywords: Flexible delivery, flexible learning, collaborative inquiry, praxis, tertiary teaching practices.

Introduction

Flexible delivery has received considerable attention in university settings internationally, including in Australia. Relevant literature provides evidence of the benefits and challenges of flexible delivery for the promotion of flexible learning, and some insights into the learning of academics involved. However, detailed investigations of whether and how flexible delivery can stimulate deliberate interactions between academics to foster a more robust, praxis-oriented disposition is an area for further investigation. This paper explores the extent to which such a disposition was evident amongst a group of academics who met together to better understand, with a view to improving, the teaching practices which characterised their work in the wake of their university's decision to invest in a new technology platform for flexible delivery. These academics taught across several pre-service programmes in the Education Faculty of a regional Australian university.

'Flexible learning' and 'flexible delivery' have attracted considerable attention in the academic literature, including a special edition of this journal published in 2000. The literature reveals flexible learning is a contested concept, difficult to define. Hart (2000, p. 98) argues that while flexible learning is the 'catchcry of the moment' in universities, there is no single definition or understanding of the term. Guest (2005) claims there are two dimensions to flexible learning. The first is described as truly student-centred, and involves negotiation with students about their learning. The second relates to the specific institutional decisions and arrangements put into place to 'deliver' student-centred learning – flexible delivery – and is typically conflated with the introduction of advanced information and communication technologies (ICTs). Cullen (2007) argues flexible learning implies an explicit link between these two conceptions of learning and delivery. Collis and Moonen's (2002) understanding of flexible learning is somewhat broader, making explicit links between technology, pedagogy, implementation and institution.

Existing research reveals efforts to employ flexible delivery have led to considerable, although varied understandings of flexible learning amongst academics, and that

academics' learning has typically been undertaken as an individual activity. Edwards' (2005) case study of the adoption of new technologies in the context of institutional requirements for change reveals how an academic learnt to foreground teaching and learning rather than technology per se. Torrisi and Davis (2000) also reveal how academics who worked with an educational designer found the experience of producing on-line resources a worthwhile and challenging learning experience, but one which also provided little time for reflection on the nature of the learning resources being produced because of tight timelines, feelings of being a 'supplier' of services rather than a true team member, difficulty changing thinking as previous approaches to teaching are no longer applicable, concerns about expectations associated with the flexible learning process, lack of familiarity with the capacity of the media, and general feelings of inadequacy. In the shift to flexible delivery, Taylor (1996; 1997) found academics' understandings of the application of ICTs to their teaching practices were influenced by a process of learning informally from one another ('tribalism'), of actively interrogating their practices in collaboration with one another over the long term ('community'), of needing to learn about new technologies prior to engaging with students ('refuge'), and of developing principles for pedagogical practices and for the pedagogical application of technology ('developing principled practices'). Taylor (1998) also revealed a tendency amongst academics who are early adopters of ICTs to be lone rangers who embrace new technologies with a view to improving their own teaching practices, but that these academics' learning typically does not become institutionalised (Taylor, 1998; emphasis original). McLoughlin (2001) advocates academics learning via more participatory, action research partnerships, rather than 'top-down' initiatives when seeking to foster institution-wide change. Cullen's (2007) research reveals loose associations between academics involved in more systematic change at the school level in their university, and the importance of structuring support for change for academics in the shift to flexible learning. In some university settings, the provision of flexible delivery has been assumed to automatically lead to academics' learning, and the adoption of flexible learning approaches (Roberts, 2001); in some universities, there is also evidence of resistance to the institution-wide adoption of flexible delivery (Kirkpatrick, 2001).

The research presented adds to this existing literature by focusing upon how the decision to implement flexible delivery at an Australian regional university stimulated academics' praxis in the form of committed, collaborative inquiry into the nature of their teaching practices, and efforts to better facilitate student learning. While it may be possible to deduce how such a praxis-oriented disposition was evident amongst academics influenced by flexible learning in the existing research literature, such a focus is not explicit.

Understanding and researching praxis in practice

From the outset, it is acknowledged that praxis is a contested concept. Rönnerman (2008) argues that within the Swedish tradition, praxis has two distinct meanings: one derived from an Aristotelian conception of practice as morally right and committed action, and a second meaning which construes praxis as a particular custom or way of doing things. Mattson (2008) emphasises the second notion of praxis, rather than the first. Kemmis and Smith (2008) initially define praxis as individual action which is 'morally-committed, and oriented and informed by traditions in a field' (p. 4), a

position closer to Rönnerman's (2008) first account. Kemmis and Grootenboer (2008) then take this a step further by advocating a more post-Hegelian position which foregrounds those actions which are oriented towards doing the 'right' thing, or the most good, for both the individual/s involved, and the wider context/world in which they live and work. This is similar to Mayo's (2004) Freirean account of praxis as involving participants acting and reflecting together in a dialectical process in order to transform their practices in a specific setting. Similarly, Grundy (1987) construes praxis as an emancipatory practice, one which is grounded in an iterative process involving ongoing cycles of action and reflection amongst participants. Considered reflection, in the form of active and engaged deliberation on the part of practitioners is itself an important part of the action process.

It is this process of active deliberation and engagement on the part of a group of academics collectively interested in seeking to transform their teaching practices, in the context of the adoption of flexible delivery within their university, which is the focus of attention in this paper. The extent to which academics were involved in a public (rather than individual/private) process of engaged deliberation and interrogation of their teaching practices and student learning amongst themselves, is construed as evidence of these educators' learning as a form of praxis. This contrasts with the more typical, individualistic, private reflective practices which characterise academics' efforts to interrogate their teaching practices.

Flexible learning at 'Regional' University

In recognition of academics' praxis as inherently local and situated, this paper draws upon a case study of a group of academics seeking to interrogate their teaching practices in the context of their university's decision to introduce more flexible delivery approaches. These academics worked at a single campus of 'Regional' University, a multi-site Australian institution providing both face-to-face and distance education to more than 30 000 students. The University prides itself on its capacity to educate students in its local catchment area, across Australia and around the world. There is a particular emphasis upon the provision of education for the professions. To assist in serving its charter, a decision was made in 2006 to develop more 'flexible', (sometimes described as 'blended') approaches to teaching and learning. As part of this process, the 'Flexible Learning Institute' (FLI) was established at the University, and signified an institution-wide commitment to building a culture of research and teaching innovation around issues of flexible learning. The Institute adopted an expansive definition of flexible learning to inform its work: 'Flexible learning and teaching examines learning, teaching and assessment strategies using multiple forms or modes including: face-to-face, print, multimedia, online and blended learning environments' (FLI website)¹. As part of the move towards more flexible learning, the university purchased an educational platform supportive of a flexible delivery educational interface. This interface was a multimedia forum which enabled students to engage with one another in a variety of synchronous and asynchronous ways, including via Wikis, Blogs, Chat Rooms, and more traditional on-line fora. This process included providing a single on-line site for both on-campus and off-campus students for all subjects. It also involved ensuring uniformity of subject and course provision across all campuses in the state in which the University was located. This

_

¹ A full reference to this site has not been included to preserve anonymity.

was a major departure from the previous practice of treating internal and external students separately, and of academics organising their teaching experiences at the campus level only, rather than across campuses as a whole.

Method and methodology

The data comprise transcripts of six meetings of seven academics who met together during the first half of 2008 to inquire into the nature of their teaching practices in the context of a university-wide decision to move towards a more flexible learning approach at 'Regional'. Participants had varied backgrounds, and included a professor of education with more than thirty years of academic and private consultancy experience, two established academics (associate professor and senior lecturer) with experience in further education/vocational education and training, and four early-career academics with experience in primary and secondary teacher education. While participants had worked with remote students through on-line delivery previously, for most of these academics, this was their first experience of more systemic efforts to foster flexible learning, and of the application of ICTs for this purpose.

The decision to form the group arose from a shared concern amongst these academics about how to improve their teaching practices in the context of their university's decision to introduce more flexible delivery approaches. The meetings of the group arose out of informal discussions between participants, all of whom knew one another well from previous individual and collaborative work in the Faculty of Education in which they worked. Participants made a commitment in an initial, informal meeting to come together to discuss their work more systematically over monthly intervals. While there was no definitive 'leader', the author agreed to organise the meetings for participants.

The discussions of the group were open-ended in nature, and revolved around the broad theme of how the conditions under which these academics were currently working influenced their teaching practices. General questions guiding the work discussions included the nature of academic conditions modern/postmodern university, how the move towards flexible delivery and flexible learning influenced the teaching practices seen as possible, or currently enacted, and the problems and benefits associated with the shift to flexible delivery and learning for students' learning. Discussions during each meeting were guided by the perspectives and contributions of different members of the group. Transcripts of previous meetings were used to stimulate discussions at subsequent meetings. This involved a process of intersubjective meaning making about the factors which enabled and constrained these academics' practices. In keeping with Habermas' (1996) call for communicative action, the collaborative inquiry process involved a dialogic exchange between interlocutors interested in engaging with and understanding one another in an open manner, free from deceit or ill-intention. Discussions were based on a substantial level of trust already established from previous work and associations.

An emergent thematic analysis (Shank, 2002) approach, involving manually searching for patterns within the data, was applied to the transcripts of the meetings. This revealed several key themes related to academics' learning in relation to their teaching

practices and student learning. Three key themes were elicited from the data in light of the focus upon academics' praxis as active, collaborative deliberation and engagement on the part of participants endeavouring to improve their teaching practices in context. The data revealed evidence of praxis in the form of: in-depth discussions into academics' understandings about flexible learning in the context of their university's move to flexible delivery; deliberations about the change process under these circumstances, and; interrogation of the effects of ICTs on teaching practices and student learning. These themes pervaded the data, recurring over and over again in the conversations of participants in this study. These themes were elicited and refined by the researcher, in consultation with participants. All names are pseudonyms.

Findings

The way in which each of the three broad themes reveals evidence of academics' praxis is outlined in each of the separate sections below.

Learning about flexible learning

Academics' learning as praxis was evident in the way in which several participants collectively struggled to comprehend and define flexible learning (which they also described as 'blended learning') in the context of their university's move to flexible delivery:

Lindsay: Well, the definition of blended learning that we heard last Monday week, was sort of, that blended learning was 'online plus', so 'technology plus', whereas a lot of us sitting there would have said blended learning ... doesn't need to have the technology in there...

Janet: ... I'm not sure how you can cut off the technology from the blended learning is all I'm really saying...

Mika: Isn't it taken to be a tool for flexible learning and flexible delivery, rather than technology in itself, so, it's part of the whole picture, rather than technology, if we're discussing technology-?

Lindsay: I thought it was; I would have said it was about using whatever mode is best in a particular situation or using a combination of modes to get there ...

Lindsay: I see these words sometimes, and I just wonder. It's a bit like saying the word technology, you know; it can mean anything from a tin opener to a computer, and everything beyond.

While all participants learnt that the push towards flexible learning was officially sanctioned in University policies, there was also questioning amongst most participants about the University's understanding of flexible/blended learning:

Kim: But it's a pretty official thing really isn't it, blended learning now?

Andy: Well, it seems to have the support of the University, in so far as, it's a part of the teaching and learning plan, a part of the policies, that's sort of the mandatory policies around

teaching and learning, and the learners. So the notion of blended learning is something which has the endorsement of the University-

Lillian: Do you think the University understands what it means?

This critique was also apparent in explicit concerns amongst most members about the connections between flexible learning approaches and student learning outcomes:

Mika: ...To what extent...does [flexible learning], if indeed it does at all, address fundamental questions that we all pose: why we are assessing; what we are assessing?... What are the students learning...?

The desire to discuss and critique the nature of flexible learning, how it was construed within the University, including perceptions of its limitations, revealed an openness to issues surrounding the move towards more flexible delivery approaches – in short, a level of praxis.

The challenge to change

Academics' discussions also revealed that the decision to implement the technology platform across the University was a significant change, which caused uncertainty and discomfort. This was the case for most participants:

Kim: [The technology platform] is a challenge for us...

Mika: ... with the introduction of new platforms, notwithstanding the fact that we have some technological competence, we're all cast back into the role of being a novice again.

Janet: ... I found, I had to try and really push myself to learn about the technology platform

The challenge to change led to the asking of fundamental questions amongst all participants about why academics were doing what they were doing, and collaborative interrogation about the philosophical underpinnings guiding their work. An example of such questioning occurred during the fourth meeting:

Lindsay: I think the very important question to ask, of ourselves as teachers, is the question about the extent to which these new forms of teaching, change what we consider to be important principles about the way in which we work ... I think that's a very important, if you like, philosophical question to ask...

Mika: Well, the question going on for me, is that, perhaps, every time we get into these positions where we're being asked to change, we need to sometimes go back and ask ourselves: What are we trying to do here? ... Perhaps what we need to do is go back and ask that fundamental question ... What are we trying to do, and will we still be able to do this, and perhaps, we may be able to do it better...?

For several participants, the move to flexible delivery also involved considerable learning about both the complexity and benefits of developing resources involving collaboration between academics. This was exemplified in an early discussion:

Nanette: Because I know how much time you spent on [cross-campus subject development] and in the end it didn't work so well anyway, did you say?

Andy: It's worked well enough to get by for this semester, and it'll be okay for other semesters. I mean, overall ... Overall it's kind of OK, and that's the reason I persevered with this. It's kind of worth it because it does mean that I can do the best of my stuff, and Lydia [colleague on another campus] can do the best of hers. So students will actually get something that's better than if I was just doing my thing and she was just doing hers...

Such exchanges revealed evidence of praxis in the form of concern for both student learning, and the material conditions influencing student learning.

Critiquing ICT applications

Academics' praxis was also evident in how all participants related their understandings about the particular technology platform. All academics' understandings went beyond just a focus on the technology *per se*, and was infused with concerns about its application. For one academic, this involved collaborative research with an international colleague into the effects of various technology platforms on academics' teaching practices:

Lindsay: When I was away on study leave, I started work with a lovely young person from the University of Valladolid ... And we were looking at the kind of practice that he was engaged in with his university...and then what our university is doing, ... We're half way through an article called 'Platforms and Practice', which is about the way in which the particular choice of technological platform ... has a profound impact on the way people regard their teaching practice...

There were also times when participants' spoke more overtly about the technology on its own. The concerns about the relative lack of resourcing to support the new technology platform evident in one participant's comments were representative of such concerns within the group:

Kim: But if we were to compare ourselves with the College of Education, The University of Illinois, which is a very rich university, we would expect to have, in addition to Eleanor [educational designer], three other people working with us, on the technology stuff. So you'd have several people that you could ring ...

However, these concerns about the technology were typically expressed in a broader context of support for and interest in promoting more engaged and interactive experiences for students. This same respondent, while concerned about resourcing issues, did not allow these concerns to dominate. This was evident in his comments at a later meeting in which he foregrounded academics' relationship with students:

Kim:... I don't think it matters whether [the technology platform] is the best or the worst system, because, we'll supplement it with other things if it's needed... because we want to work with our students...

Working with students was valued, and part of this valuing involved keeping students' needs in mind. This was a shared concern amongst all participants. Such concerns were exemplified in how one participant explicitly foregrounded students' needs, rather than the technology *per se* as the necessary locus of attention. This was in response to several participants' concerns that at times it seemed the University was advocating a very uniform model of flexible learning:

Elsa: ... to me, you seem to blend things to meet the students' needs, not to impose a sameness across practice

Academics' discussions revealed a desire to foreground students' needs, even when there were tensions expressed over the use of ICTs.

Teacher talk: Praxis in practice

Academics' struggles to make sense of the shift to flexible learning, as part of the push for flexible delivery, revealed a praxis-oriented stance to their own learning. This was evident in the way academics debated and contested amongst themselves about what flexible learning actually meant. For these academics, flexible learning was more than just the 'catchery' of the moment (Hart, 2000). Participants' concerns about whether and how the University understood the concept, and what the concepts of flexible delivery and flexible learning really meant for student learning, revealed active interrogation of the concepts, and concern about their effects. The critique of flexible delivery approaches went beyond superficial conceptions of ICT provision as automatically leading to flexible learning (Roberts, 2001). While flexible learning had been adopted officially in policy by the University, participants queried amongst themselves whether there was a deep understanding of the implications of the move to flexible learning; they sought to make explicit the link that should exist between student learning and delivery (Cullen, 2007). Theirs was a more nuanced understanding and appreciation of the difficulties associated with institutional moves to flexible learning (Edwards, 2005).

A praxis-oriented disposition within the group was also apparent in how members described the effects of the change process associated with the introduction of flexible delivery. The change process was construed as problematic for some participants, whose learning together revealed feelings of inadequacy (Torrisi & Davis, 2005), as academics became 'novices' again. Participants' candid comments about their difficulties engaging with the move to flexible delivery also reveals how the community they formed acted as a 'refuge' which enabled them to learn about the move to flexible learning in a safe environment (Taylor, 1996;1997). Academics recognised that they were being required to step outside their comfort zone, and at times this created considerable angst about the extent to which student learning could

be best facilitated. In part, voicing such concerns served as an opportunity to think anew about these academics' teaching practices.

Academics' learning as praxis was also evident in their collective recognition of the affordances provided by flexible delivery technologies. The change to flexible learning was recognised as potentially benefiting student learning, even as the complexity of engaging with actual flexible learning technologies was acknowledged (Torrisi & Davis, 2000). Participants were not resistant to flexible learning as has sometimes been the case in the institutional shift to flexible learning (cf. Kirkpatrick, 2001). Rather, the way in which several participants interrogated the application of ICTs in relation to their teaching, and questioned whether this application changed the principles underpinning their work, including whether the use of ICTs would lead to improved student learning, and how the technology could assist academics in improving student learning, served as evidence of active engagement with the shift to flexible delivery. Given participants' interest in these discussions as a means of contributing to reflecting on their own practices, such responses constitute part of an action research cycle - an approach which enables the explicit interrogation of assumptions about pedagogical practices (McLoughlin, 2001). Such responses also resonate with Taylor's (1996; 1997) argument that the application of ICTs can encourage principled pedagogical practices. Such principles seemed to underpin the discussion involving one academic who explained how he persevered with the implementation of the technology platform and cross campus and cross-mode initiatives, in spite of the difficulties encountered, because he believed it would result in better learning opportunities for students than if he had worked alone. The opportunity to openly discuss such issues reveals how the collaborative, reflective process in which these academics engaged enabled student learning to be foregrounded; such collaboration also challenges the more individualistic applications of ICT (Taylor, 1998). Although not institutionalised in the way that support for the change to flexible learning needs to be undertaken in universities (Cullen, 2007), in a sense, these discussions did serve as a structure to assist these academics to engage more fully and optimistically in the change process.

Academics' discussions amongst themselves about the application of ICTs also revealed how the shift to flexible learning stimulated a more praxis-oriented disposition. This was apparent in the way one academic described how the shift to flexible learning led her to engage in an international, comparative research project into the effects of technology platforms upon teaching practices. involvement in the group at 'Regional', and her collaboration with an academic at Valladolid went beyond the individualistic 'lone ranger' innovator (Taylor,1998) evident within the literature on ICTs and pedagogy. A praxis-oriented disposition was also apparent in a discussion involving another academic who ultimately did not believe resource limitations should inhibit a more learner-focused application of the technology interface at the University. While this academic's initial focus upon resourcing issues around technology could be construed as evidence of a focus solely upon Guest's (2005) second dimension of flexible learning with its emphasis upon technology per se, this academic's prioritising of the desire of academics to work with students, and to supplement the technologies where required, also revealed a much more student-centred approach to his teaching practice. Such a shift in position may also be construed as evidence of the benefits of ongoing engagement with these issues over the six month period in which meetings were held, and of praxis development over time. Academics' praxis was also apparent in the way their discussions foregrounded student learning, and critiqued applications of flexible learning which encouraged homogeneity ('sameness of practice'). In keeping with praxis as active deliberation and engagement (Grundy, 1997), and seeking to transform their (teaching) practices (Mayo, 2004), these academics were constantly publicly (amongst themselves) critiquing the extent to which the technology platform provided the conditions for improved teaching, and ultimately, student learning.

Conclusion

This article has drawn upon research into flexible learning, flexible delivery, and praxis, to reveal how deliberate, collective inquiry into the introduction of flexible delivery at an Australian university stimulated academics' praxis. Such praxis was evident in collaborative and robust discussions between academics – discussions which enabled inquiry into academics' teaching practices, and insights into student learning. While more research into the ongoing/subsequent effects of these discussions on student learning/outcomes is necessary, such collaborative inquiry itself is revealed as an agentic means of fostering academic development, for the potential and actual benefit of academics and students, and the contexts in which they live and work.

While academics were uncertain about the nature of flexible delivery, and were sometimes critical of how it had been implemented, the way in which they critiqued its introduction, supported applications of the technology platform construed as improving teaching practice and assisting students, and were critical of those which were not, revealed a strong desire to investigate their teaching practices and students' learning, as a vehicles for improving their teaching practices. Importantly, participants were not simply conceptualising and interrogating their teaching practices alone, but in association with others, and with a view to improving their own teaching, for the benefit of students' learning. Further research which explores how these collaborative conditions came about, and how ongoing collaborative inquiry amongst academics may be sustained, is relevant.

Individually, such deliberate, collective inquiry approaches provide an opportunity for academics to reflect upon and interrogate the extent to which their own engagement with flexible delivery is focused upon student learning. Institutionally, collaborative inquiry into academics' teaching practices focuses attention upon teaching practices in a way which is atypical but potentially very powerful for influencing current academic cultures. Sustained inquiry communities represent significant institutional supports for the development of a culture of ongoing investigation into academics' teaching practices. Evidence of praxis development through a collective and active focus upon academics' teaching practices can also inform policy interventions in university settings, helping to ensure that policy serves as a vehicle for improved practice, and challenging ill-informed or underdeveloped policy-led approaches to practice. Further research into the nature of collaborative inquiry, the characteristics of effective inquiry communities (as well as those of ineffectual communities), and the effects of policies based on these principles, would be particularly useful for informing improved policy and practice.

References

Collis, B. & Moonen, J. (2002). Flexible learning in a digital world [1]. *Open Learning*, 17(3), 217-230.

Cullen, P. (2007). Developing and implementing models of flexible learning. *The International Journal of Learning*, 14(7), 112-118.

Edwards, S. (2005). Higher education in the twenty-first century: examining the interface between graduate attributes, on-line and problem based learning at Monash University. *Technology, Pedagogy & Education*, 14(3), 329-352.

Grundy, S. (1987) Curriculum: product or praxis? London: Falmer Press.

Guest, R. (2005). Will flexible learning raise student achievement? *Education Economics*, 13(3), 287-297.

Habermas, J. (1996). *Between Facts and Norms* (W. Rehg, Trans.). Cambridge, MA: MIT Press.

Hart, I. (2000). Learning and the 'F' word. *Education Media International*, 37(2), 98-101.

Kemmis, S. & Grootenboer, P. (2008). Situating praxis in practice: Practice architectures and the cultural, social and material conditions for practice. In S. Kemmis & T. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 37-62). Rotterdam: Sense Publishers.

Kemmis, S. & Smith, T. (2008). Praxis and praxis development. In S. Kemmis & T. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 3-13). Rotterdam: Sense Publishers.

Kirkpatrick, D. (2001). Staff development for flexible learning. *The International Journal for Academic Development*, 6(2), 168-176.

McLoughlin, C. (2001). Creating partnerships for generative learning and systemic change: Redefining academic roles and relationships in support of learning. *The International Journal for Academic Development*, 5(2), 116-128.

Mattson, M. (2008). Reflections on 'Enabling Praxis'. In S. Kemmis & T. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 249-254). Rotterdam: Sense Publishers.

Mayo, P. (2004) *Liberating praxis: Paulo Freire's Legacy for Radical Education and Politics*. Westport, CA: Praeger.

Roberts, T. (2001, December). From distance education to flexible learning. Paper presented at the International Academy for Information Management Annual Conference: *International Conference on Informatics Education & Research*, New Orleans, Louisiana.

Rönnerman, K. (2008). Reflections on 'Enabling praxis'. In S. Kemmis & T. Smith (Eds.), *Enabling praxis: Challenges for education*, (pp. 254-261). Rotterdam: Sense Publishers.

Shank, G. (2002). *Qualitative research: A personal skills approach*. Upper Saddle River: Pearson.

Taylor, P., Lopez, L. & Quadrelli, C. (1996) Flexibility, technology and academics' practices: Tantalising tales and muddy maps. Canberra: Australian Government Publishing Service.

Taylor, P. (1997) Creating environments which nurture development: messages from research into academics' experiences. *International Journal for Academic Development*, 2(2), 42-49.

Taylor, P. (1998). Institutional change in uncertain times: *Lone ranging* is not enough. *Studies in Higher Education*, 23(3), 269-279.

Torrisi G. & Davis, G. (2000). Online learning as a catalyst for reshaping practice: The experiences of some academics developing on-line learning materials. *The International Journal for Academic Development*, 5(2), 66-76.