

Resolving ambiguity: a way forward for relating scholarship, teaching and research in HE academic practice

Phil Poole

In the previous paper Professors Healey and Jenkins explored the dimensions of research informed teaching (RIT) which relate particularly to the students' engagement with research. This paper seeks to explore the experience of staff and its impact on their professional development, gained through engagement with RIT.

Professional inquiring into teaching and learning

Griffiths' (2004) typology of research informed teaching proved useful to the CCCU RIT project as a description of its possible dimensions (see Section 1):

- teaching can be research-led
- teaching can be research-oriented
- teaching can be research-based
- teaching can be research-informed.

The last of these dimensions Griffiths describes as:

"Teaching can be research-informed in the sense that it draws consciously on systematic inquiry into the teaching and learning process itself."

Jenkins & Healey (2005) cite Bradford's alternative formulation which adapts this dimension of RIT to:

***Pedagogic research** – enquiring and reflecting on learning.*

The **research-informed** dimension of RIT has increasingly become synonymous with what is termed **pedagogic research**. The case studies in the Pedagogic Research section of this publication illustrate a range of activities, subsumed under this banner, which are *not specifically* aimed at developing students' experience of research but illustrate how professionals seek to understand their practice. The Pedagogic Research section of this publication includes:

- evaluating the quality of the students' learning experience
- academics evaluating the effectiveness of existing aspects of programmes
- innovation within the curriculum
- developing the teaching practice of individuals or teams.

Despite the term 'pedagogic research' being used extensively within the sector there is a lack of clarity about its nature and the significance of systematic inquiry within HE academics' practice. For example, Cousin (2009) in a book entitled '*Researching learning in higher education*' makes no mention of the term. However, Norton (2009) entitles her book '*Action research in teaching and learning: a practical guide to conducting pedagogic research in universities*', although throughout, the word 'action' is inextricably linked as 'pedagogical action research'.

A more inclusive construction of the relationship between scholarship and pedagogic research is offered by the *scholarship of teaching and learning* (SoTL) movement which takes academic practice surrounding learning and teaching beyond pedagogic research and even systematic inquiry, to attempt a description of how academics develop their practice in this area of professional knowledge. The SoTL concept is also the subject of critical discourse with the profession (Boyer, 1990; Elton, 1992; Healey, 2000;

Kreber, 2002) and is itself a source of uncertainty for many academic colleagues (O'Brien, 2008).

In the context of evaluating the CCCU exploration of the RIT concept, this paper draws on the literature surrounding SoTL and the role of systematic enquiry and pedagogic research within it. Additionally it uses the voices of colleagues gathered from two research studies conducted at CCCU during the lifetime of the project. These studies employed loosely structured interviews undertaken with RIT project participants and other academics as their source of primary data.

Colleagues talking about research, scholarship and teaching

Research and evaluation surrounding the RIT project at CCCU highlighted the diversity of colleagues' individual interpretations of the terms 'research' and 'scholarship', with many seeing a continuum between them:

In everybody's head where research stops and scholarly activity starts and vice versa is a very moot point really. (HoD)

An area of uncertainty was the extent to which 'reading around the content' in preparation for teaching can be conceived as scholarly activity, rather than engagement in 'research' activity:

I think that 'reading around the subject' is a scholarly activity necessary in order to keep your teaching up to date. It is not a research activity. It is a preparation for teaching. Research is knowledge acquisition, which is about gaining knowledge and an understanding that is more adequate than we have had before. It is also about generating knowledge, which is to add new knowledge to the existing body of knowledge in a certain discipline.

Here the opposing view is presented:

Reading around the topic you are going to teach is of course research. If anything you are trying to learn about a particular topic I would call it research. If you are exploring an area and trying to understand it and by that it could be by an experimental point of view but also from a teaching point of view, where you are going to a number of different articles to find out what they said and what they found out, is research.

The first is concerned not to confuse research for teaching with the 'real thing', the second makes a direct link to teaching. This tension was visible in many responses. However, many academics appeared to have adopted a working definition, at least at a personal level.

If you only see research as an externally funded data gathering exercise for an external body, or simply generating a paper for peer review journals, that is a too narrow view. It is a type of research. Research is much wider than that. When you are preparing for a lecture, you read journal articles or books. Some people call this scholarship, but it is a type of research.

I don't think there is any need to distinguish between research and scholarly activities. You can also conduct research based on your own teaching. That is another type of research.

These accounts illustrate the different approaches to the research-teaching nexus (Neumann, 1994) within academic life. A number of writers have maintained that the nexus is a major factor in academic identity which determines not only approaches to disciplinary research but also stances on learning and teaching (Fanghanel, 2007; Clegg, 2008; Land, 2004). Colleagues' descriptions of feeling 'challenged' by their identity were usually centered on their own perceived lack of 'research output'; the reasons given were usually down to teaching and administration of programmes, which dictated their allocation of time and effort.

I don't quite know why I struggle. I still have this thing when they say that I am an academic, but I say no, I am a [discipline practitioner] who is in academia.

.. predominantly a teacher, but the majority of my activity is focused on students' learning practice, so I see myself as a teacher, not as an academic if you like, but more than a lecturer.

... the reason why I am in academia, although I love research I don't like to do only research. I knew when I got the job as a lecturer that teaching would be very important, you are a teacher, you are a researcher and for me that is not a conflict.

Colleagues responses correlate with Barnett's (1999, p.172) assertion that the supercomplex university "is one in turmoil where the basic assumptions as to one's self-identity as researcher, scholar and teacher are kept perpetually in the air".

Professional knowledge

Conceptual tensions arise within the research-teaching nexus when attempting a description of what constitutes academics' professional knowledge. The primary allegiance for most HE academic staff would be acknowledged to be their subject or profession (Jenkins, 1996). Knowledge of their discipline is fundamental to individuals' professional standing, usually recognised through research and publication (Macfarlane, 2004; Gibbs, 2002). Additionally, the requirement to develop the next generation of professionals also forms part of HE's approach to professionalism, e.g. research supervision (Pearson & Brew, 2002; Knight & Trowler, 2001). It is teaching's relationship with research and scholarship which forms the focus of a critical discourse surrounding professional knowledge.

In an attempt to resolve a growing tension between teaching and research in professional practice in the USA, Boyer (1990, p.xvi) offered a re-categorisation of HE professional knowledge:

"The time has come to move beyond the tired old teaching versus research debate and give the familiar and honorable term scholarship a broader and more capacious meaning, one that brings legitimacy to the full scope of academic work".

Boyer went on to identify four 'scholarships': the scholarship of discovery; the scholarship of integration; the scholarship of application and the scholarship of teaching. For Boyer, engaging with the 'scholarship of teaching' requires that the 'teachers' "take a professional approach to teaching, in the same way as they would take a professional approach to their disciplinary-based research. In other words excellence in teaching requires a reflective, scholarly, evidence based approach to helping students learn".

In the UK Elton (1992) saw a further rationale for widening the traditional descriptions of what constitutes academics' professional knowledge:

"As a consequence of widening participation and student expectations, there has, since the early 1990s, been a growing awareness that to be equipped for professional life in 21st century, lecturers will have to include in their professional knowledge an understanding of how they teach, how students learn, and the role of assessment strategies in curriculum design"

Elton goes on to argue that the 'scholarship of teaching and learning' (SoTL) is a distinct category of professional activity which needs recognition and resources. The educational development movement in the UK was led by Elton's passion and energy and he continues to press for recognition of SoTL within HE. Elton's contention that university teaching is a researchable subject and consequently it should be treated and developed as such has begun to gain ground over the last 20 years, i.e. pedagogic research should be recognized and resourced alongside traditional research. "To be scholarly teachers, academics need to use the same kind of thought processes in their teaching that they apply to their research" (Elton, 1992).

Boyer and Elton's appeal for recognition of a scholarship of teaching have subsequently been extended and critiqued within the sector. For Martin (1999), SoTL involves a further set of activities than simply engagement in pedagogic research:

- Engagement with the scholarship of others on L&T
- Reflection on one's own teaching and student's learning
- Communication and dissemination of aspects of practice and theoretical idea about L&T

In their response to Boyer's original work, Kreber & Cranton (2000) identify ambiguity in the meaning of SoTL and offer an alternative typology which identifies three different, but equally important, domains of teaching scholarship:

- Instructional: What actions do I take in teaching? – a basis for the strategies used
- Pedagogical: How can I foster students' learning? – knowledge of how students learn
- Curricular Knowledge: Why do I teach this way? – purposes goals and rationale.

Kreber & Cranton (p.492) also offer a number of indicators through which academics could identify and evaluate engagement with SoTL, as one could for traditional research. These include:

1. Discipline-expertise which includes the discipline of teaching
2. Innovation in pedagogic and curricular development
3. Outcomes that are trustworthy and replicable by others
4. Documentation of one's own teaching and students' learning
5. Peer review of activities which demonstrates and validates learning
6. The impact of the work evidenced through evaluation, sharing and dissemination

These indicators of scholarship all involve reflection on both experience-based and research-based knowledge on teaching. The case studies in this publication demonstrate many of these indicators and could therefore be seen as evidence of the contributors' engagement with SoTL.

SoTL and pedagogic research

Boyer saw research as the cornerstone of the scholarship of teaching: "The improvement of learning and teaching is dependent upon the development of scholarship and research in teaching" (Prosser & Trigwell, 1999b, p.8). This was also supported by Martin et al. (1998) who argue that subjecting teaching to the research process is necessary to elevate its status: "If teaching is to be valued equally with research then, like research, teaching must open itself to the scrutiny of theoretical perspectives, methods, evidence and results".

However, Trigwell (2003), in a conference presentation, resists fully equating pedagogic research with the scholarship of teaching:

- "Research on teaching is neither a necessary nor a sufficient component of the scholarship of teaching
- Investigation / enquiry / evaluation of one's teaching, or teaching context is an essential part of the scholarship of teaching
- If the scholarship of teaching is to enhance learning and the status of teaching, then that scholarship must apply to the act of teaching, not something that is essentially about research."

Academics engaged in the SoTL movement identified that a 'discipline' focus for scholarship was one of its significant features (Healey, 2000; Kreber, 2002; Lucas, et al 2007). Their argument was that the advancement of knowledge about teaching and learning in the discipline and the importance of pedagogical content knowledge requires pedagogic research to be conducted by academics within their own discipline and not necessarily seen as an activity undertaken on their behalf by specialist educational researchers (Kreber, 2002, p.160-161). For example the

'Curricular Knowledge' element of SoTL, postulated by Kreber, requires discipline specific knowledge applied by experts in the subject.

'Disciplinarity' within SoTL and pedagogic action research (Norton, 2009) could be seen as synergistic as the epistemology of action research is founded on being 'inside' the research frame, not acting as a dispassionate researcher. Discipline specialists will therefore bring their own subjectivities to generating and understanding the issues in question (Cousin, 2009). Action research offers an accessible paradigm for individual academics to examine their practice and better understand the context in which it is enacted. McKernan (1996, p.4) offers a definition of action research which offers a rationale for adopting it as a paradigm for researching HE teaching and learning:

"Action research is carried out by practitioners seeking to improve their understanding of events, situations and problems so as to increase the effectiveness of their practice."

For Elliott (1991, p.49) "the fundamental aim of action research is to improve practice, rather than produce theory". Somekh (1995) further elaborates on its power for improvement describing it moving through cycles of action and reflection as an iterative process of *investigation - change - investigation* "through which influence is achieved and new knowledge created".

The projects recorded in this publication are focused on academics' own professional practice. Whilst new knowledge was arguably being generated within the activities, their primary focus was developing or improving practice, and as such represent a body of systematic and scholarly engagement with teaching and learning. Whether RIT projects were undertaking 'pedagogic research', which had an indirect relationship with students' learning experiences, or were directly exploring students' engagement in or with research, all to an extent could be said to be working within the broad descriptions of the scholarship of teaching (Kreber, 2003). Pedagogic action research, by and for individuals, which informs systematic inquiry into pedagogy can therefore be a force for change, both in terms of its contribution to curriculum development and to the development of academics' professional knowledge.

Professional development and SoTL

Kreber (2003), in an exploration of differences between 'expert' teachers and 'regular' staff, identifies four alternative views of scholarship of teaching, of which pedagogic research was only one component. Based on an exploratory study of the role of self-regulated learning in university instructors' growth as teachers, Kreber et al. (2005, p.79) conclude:

"Next to their declarative and procedural knowledge, individuals pursuing 'expert careers' also hold important forms of implicit knowledge that distinguish them from non-experts, one of them being their self-regulatory knowledge... self-regulated learning about teaching, can make a contribution to what we presently know about how academic staff grow as teachers."

Interviews with colleagues appear to support the contention that academics are self-regulatory learners who develop their practice through a variety of mechanisms, most of which involve non-formal CPD activities which directly relate to their teaching:

I've just done this pedagogic study which has been fascinating, how I went about teaching it [topic] in the first year but it wasn't very effective, and then tried something different in year 2, and this year when I've done it, so its tracking the development of teaching skills over this 3 year period and how very differently I did it this time as to the first time, so I think in answer to your question, the first thing is the trigger and thinking creatively about how that can be put across which is not in this very didactic way which felt safe when I started, and then taking that trigger and things that happen. One of the biggest most significant things that happened was when I got to the feedback at the end of the period of teaching.....and we [colleague] had this discussion about what they were saying... and it opened up this whole new way, new perspective of looking at things. So I think the way I learn is through these triggers, things coming up, that you can then take somewhere and discuss with somebody who is going to ask you the right questions. A lot of people can ask you questions or tell you what to do but the skill I think, and the real learning, comes with people who can facilitate.

This colleague is sceptical about the value of 'formal' CPD to inform how they teach:

When people ask "what have you done L&T wise?", a lot of people would say that they have been to this seminar, and in this department it is encouraged that we do that. We do all this staff development thing, but sometimes it just doesn't help with my teaching. It is nice that they are put on and sometimes are interesting, but if someone says that they have been to all these seminars, does it mean that they are the better teachers?

Sharpe (2004, p.142) observes that "their [professionals] learning and development mostly takes place in non-formal learning situations within communities of practice (Lave and Wenger, 1991)". Knight et al. (2006, p.320) describes CPD as occurring as a consequence of "situated local practices" where learning occurs through participation in everyday contexts.

Mostly I think it comes from peers, and that's facilitated by the University because within my department or at least within this part of the department, because we're a small group as you know, we cross refer ideas a lot.

Colleagues' responses to prompts about where their professional development and learning originates, mainly started from the interface of engagement with students in learning contexts. Some described informal or formal pedagogic (action) research which has recently been incentivised through the RIT initiative. The interface with teaching and the students' responses to creative approaches to L&T had an immediacy which Schön (1984) described as 'reflection *in action*'. This is characterised in the following comment:

Unless you are engaging with the students... as I am positioning myself as a pedagogical researcher, unless I am involved in some way with the students it is meaningless isn't it? I don't know, I enjoy being with the students as they are the ones that inspire me, they are fantastic teachers, students, they let you know very quickly if what you are doing is useful or not. I think the process of reading assignments is one of the most useful interesting and useful CPD opportunities, my perspective on it is that how well the students cope with the assignment is a reflection on how well I have taught the module.

Many colleagues also identified the powerful contribution from peer interactions (for those with access to close colleagues who shared their area of practice, e.g. sharing teaching of a module or an office).

There is no conversation I have with him that doesn't end up with me feeling that I have advanced my thinking.

The significance of tacit knowledge operating within professional learning, which has been acknowledged by a number of writers (Knight & Trowler, 2001; Eraut, 2000), includes the norms, discourse and value sets associated with a research culture and teaching and learning, encountered through daily work processes. Groups and teams are pivotal in exchanging tacit knowledge and even making it more explicit.

We have got a good team here. We talk about all the issues concerning our discipline and teaching methods. That is a kind of staff development in itself.

With an increase in specialisation within disciplines and the growth of inter-disciplinarity, traditional discipline boundaries are dissolving. Supporting peers in developing their practice or through working on joint ventures was also a recurring theme in the interviews.

This RIT participant found collaboration with a colleague very rewarding, contributing to their own professional development:

The pedagogy research informed teaching project that I've been doing with [colleague] for the last 2 years now, I think it's helped quite a lot in that regard, because obviously [colleague] is much further down the scholarly [pedagogy] line. We have merged our interests and we're putting a first draft of an academic paper that we want to get published in a refereed journal... we've started up a new module... and we had our one day conference... which was a great success. We are going to try to follow up with the people who participated in the study on the kind of impact it has had on their work.

For Elton (2009) professional development "... should arise from academics' practice and be problematised, as in other forms of research and it would therefore be self-initiated and autonomous". The RIT projects as a whole were not self-initiated but the areas under scrutiny drew on interests and in some case professional passions. Generally the ideas were already in the mind of participants and simply needed the incentive of some funding or recognition to prompt their realisation.

In many ways we construct our own set of values about the research we undertake, and the motivation and will to continue is driven from within. But institutional recognition helps. The timely availability of funding for our project enabled us to reach into a research area that was emerging and changing at the same time. The RIT initiative was the right form of vehicle to enable us to penetrate this arena at the right time. The involvement of students was of central importance.

Breslow *et al.* (2004) suggests that one of the key ways to engage colleagues in their development as critical and reflective teachers, that goes beyond the hints and tips they may need at the beginning of their teaching careers, is to stimulate their intellectual curiosity. "The asking of questions is at the heart of intellectual curiosity and engaging staff in the scholarship of teaching and learning (SoTL)."

Engagement with SoTL activities, such as those illustrated in these case studies, has had a significant impact on the professional development of most of the participants. Pages 66-67 record just some of their comments about engagement in the project and support the contention that educational and professional development are well served by systematic inquiry contributing to SoTL.

Reward and recognition: a key to a future for SoTL

Ramsden & Martin (1996) believe there is "no substitute for action to promote good teachers if universities want their staff to accept that good teaching is properly recognised". The CCCU staff interviewed within this study were unequivocally committed to providing the best possible learning experience for students through their teaching and other contributions to students' learning. They would hold that they are scholarly about their practice but many felt that the effort they put into L&T often goes unrecognised, beyond the responses of students.

Yes, especially in this institution like this one it praises itself for excellent teaching and for dedication to students, you can be an excellent lecturer i.e. improving your practice and have something to prove this not just say it, perhaps not taking it from a research point of view but from a more scholarship one. I don't think you would get a promotion for that.

The majority of colleagues interviewed would welcome a signal that their contributions to L&T, as well as research and administration, were acknowledged. They felt that engagement with CPD for L&T was undertaken within the constraints of the values of CCCU as manifest through its reward and recognition structures.

The reality is we don't have to produce evidence of developing our practice, we are not measured on our output in terms of teaching and learning practice, we are measured on did we write a scholarly paper or not, or did we present at conference, which could have been on anything? So the reality is we call ourselves a teaching institution but we don't measure ourselves on it at all.

However, this colleague's response appears to indicate that their contribution to teaching at CCCU is recognised as important, in contrast with their experience in a previous university:

Where I worked before, teaching was not regarded well at all, it was necessary. But that was why I lost my previous job because the only way up was research and once you are stuck with teaching you are at the bottom. When I came here I felt 'I am doing exactly what is expected of me', I teach, and I do the research on the side.

The competing pressures and filters (influences) which act to determine academics' stance on developing L&T are categorised by Fanghanel (2007) who sees them operating at three levels within universities:

- Macro: the institutional or external factors, e.g. the research-teaching nexus within UK HE
- Meso: the departmental (or equivalent) and the discipline
- Micro: internal factors affecting the individual lecturer.

At the micro level, academic identity appears to play a significant role in the way colleagues made decisions about their professional development providing a rationale for their CPD choices.

At a meso level, faculties and departments, working within institutional structures, can provide incentives, make opportunities and facilitate formal and non-formal CPD opportunities for academics. Gibbs (2002) provides an organisational model for what he terms 'practice-based research' but makes the point that equally important is the departmental ethos with regard to recognition of educational development. The broader perspectives of professional development need to be overtly recognised at a departmental level to support engagement with CPD for L&T, alongside other aspects of academic practice e.g. research and curriculum leadership.

At the macro level, an institutional ethos which encourages and recognises individuals' contributions to the quality of L&T through its reward and recognition structures will be: "The most significant of the processes for enhancing quality is the reward for teaching excellence, for both individuals and departments." (Gibbs, 1995). The RIT Project illustrates how the University can give due acknowledgement to engagement in non-formal CPD opportunities.

These RIT participants argue for small amounts of funding, targeted on supporting development of new pedagogic approaches:

I really do think that things like the RIT money and some kind of pot that we can go to, I know its kind of hard times, but.... it's cheap professional development. It's probably cheaper than putting them on one of the staff development events.

I was really lucky and got this RIT grant and think that was a really good way... When I saw the others at the RIT conference I thought I don't fit in with my stuff as theirs was all about pedagogic, but I got in and

that was when I felt that it was appreciated that I had put in the effort. I have got this idea and want to do it, therefore you show your initiative, and then to be rewarded to be able to do it from the University, which always comes down to money, was really good.

CCCU has supported 'Development Leave', as a component of resourcing educational and professional development, for a number of years and reports from its recipients have generally been very positive about the importance of resources and recognition to engage with aspects of curriculum development in addition to disciplinary research. The indications from the project are that some resource should continue to be available to encourage and embed SoTL.

For SoTL to be appropriately recognised and rewarded with respect to the other forms of scholarship, teachers in HE need to be encouraged to adopt a scholarly approach to teaching and collect and present rigorous evidence of their effectiveness as teachers (Palmer & Collins, 2006). As Healey (2000) argues "Good teaching needs to be better understood, more open to scrutiny, and better communicated".

This publication illustrates how an institution can support and encourage staff to undertake scholarly activities which can both improve the quality of teaching and learning and enhance professional profiles.

Conclusion

An opportunity for a critically reflective dialogue about professional identity, progression, L&T and research can make a significant contribution to eliciting an understanding of professional development for the individual. Conversely, narrow definitions of research, scholarship and what constitutes academic professional development can lead to a lack of recognition and support for the ways that experienced practitioners develop their teaching.

Whilst the relationship between scholarship and research is problematic for colleagues the meaning of the scholarship of teaching and learning is even less clear. Engaging actively with the concept of SoTL requires the majority of colleagues to, as Boyer (1990) recommended, "... reconceptualise what it means to be an academic". In offering a guide to SoTL O'Brien (2008) cites Shulman's original conception of scholarship, in which he invites us to consider ourselves as "members of active communities: communities of conversation, communities of evaluation, communities in which we gather with others in our invisible colleges to exchange our findings, our methods, and our excuses" (Shulman, 1993, p6).

This publication describes a communal endeavour to produce collective knowledge that provides the basis for a transformation of teaching and learning at CCCU. The RIT project has demonstrated that encouraging engagement with the scholarship of teaching through and around research activity has, at the very least, acted as a powerful developmental experience for the participants, staff and students.

"Higher education will benefit if those who teach enquire into the effects of their activities on their students' learning"

(Ramsden, 1992, p. 5).

Acknowledgements

I would like to thank Professor Mick Healey for his contribution to the CCCU conference where he provided his perspectives on SoTL and his comments during the preparation of this paper. Also Dr. Tom Duan for undertaking the interviews and Simon Houlton who supported the RIT participants throughout the project.

References

- Barnett, R. (1999) *Realizing the university in an age of supercomplexity*. Buckingham: Society for Research into Higher Education and Open University Press.
- Boyer, E. (1990) *Scholarship reconsidered: priorities for the professoriate*. Princeton, NJ: Princeton University.
- Breslow, L., Drew, L., Healey, M., Matthew, B. & Norton, L. (2004) 'Intellectual curiosity: a catalyst for the scholarships of teaching and learning and educational development', in Elvidge, L. (ed.) *Exploring academic development in higher education: issues of engagement*. Cambridge: Jill Roger Associates, pp.83-96.
- Brew, A. (2001). *The nature of research: inquiry in academic contexts*. London, RoutledgeFalmer
- Clegg, S. (2008) 'Academic identities under threat?', *British Educational Research Journal*, 34 (3), pp.329-345.
- Cousin, G. (2009) *Researching learning in higher education: an introduction to contemporary methods and approaches*. Abingdon: Routledge.
- Elliott, J. (1991) *Action research for educational change*. Buckingham: Open University Press.
- Elton, L. (1992) 'Research, teaching and scholarship in an expanding higher education system', *Innovation in Education and Teaching International*, 34 (2), pp.154-159.
- Elton, L. (1994) *Management of teaching and learning: towards change in universities*. London: Committee of Vice Chancellors and Principals of the Universities of the United Kingdom and Society for Research into Higher Education.
- Elton, L. (2009) 'Continuing professional development in higher education: the role of scholarship in teaching and learning', in Laycock, M. & Shrivs, L. (eds) *Embedding CPD in higher education*. SEDA paper 123. London: SEDA.
- Eraut, M. (2000) 'Non-formal learning and tacit knowledge in professional work', *British Journal of Educational Psychology*, 70 (1), pp.113-136.
- Eraut, M. (2008) *Research into professional learning: its implications for professional development of teachers in higher education*. [Unpublished paper presented at Heads of Educational Development Group meeting]. 10 June.
- Fanghanel, J. (2007) *Investigating university lecturers' pedagogical constructs in the working context*. York: Higher Education Academy. Available at: <http://www.heacademy.ac.uk/projects/detail/projectfinder/projects/pf2653lr> [Accessed: 5 January 2009].
- Gibbs, G. (1995) 'The relationship between quality and research and quality in teaching', *Quality in Higher Education*, 1 (2), pp.147-157.
- Gibbs, G. (1996) 'Supporting educational development in departments', *International Journal for Academic Development*, 1 (1), pp.27-37.

- Gibbs, G. (2002) 'Institutional strategies for linking research and teaching', *Exchange*, 3, pp.8-11.
- Griffiths, R. (2004) Knowledge production and the research-teaching nexus: the case of the built environment disciplines, *Studies in Higher Education*, 29 (6), pp.709-726.
- Healey, M. (2000) 'Developing the scholarship of teaching in higher education: a discipline approach', *Higher Education Research and Development*, 19 (2), pp.169-189.
- Healey M (2003) The scholarship of teaching: issues around an evolving concept, *Journal on Excellence in College Teaching* 14 (1/2), 5-26.
- Hutchings, P. & Schulman, L. S. 1999: The scholarship of teaching: new elaborations, new developments, *Change*, September/October, 31, 11-15. Available at: www.carnegiefoundation.org/eLibrary/sotl1999.htm. [Accessed: 31st March 2010].
- Jenkins, A. (1996) 'Discipline based educational development', *International Journal of Academic Development*, 1 (1), pp.50-62.
- Jenkins, A. & Healey, M. (2005) *Institutional strategies to link teaching and research*. York: Higher Education Academy. Available at: http://www.heacademy.ac.uk/assets/York/documents/ourwork/research/Institutional_strategies.pdf [Accessed: 31 March 2010].
- Knight, P. & Trowler, P. (2001) *Departmental leadership in higher education*. Buckingham: Society for Research into Higher Education and Open University Press.
- Knight, P., Tait, J. & Yorke, M. (2006) 'The professional learning of teachers in higher education', *Studies in Higher Education*, 31 (3), pp.319-339.
- Kreber, C. (2002) 'Controversy and consensus on the scholarship of teaching', *Studies in Higher Education*, 27 (2), pp.151 -167.
- Kreber, C. (2003) 'The scholarship of teaching: a comparison of conceptions held by experts and regular academic staff.' *Higher Education*, 46, pp.93-121.
- Kreber, C. (ed) (2008) *Teaching and learning within and beyond disciplinary boundaries*. London: Routledge.
- Kreber, C., Castelton, H., Erfani, N. & Wright, T. (2005) 'Self-regulatory learning about teaching: an exploratory study', *Teaching in Higher Education*, 10 (1), pp.75-97.
- Kreber, C. & Cranton, P. (2000) 'Exploring the scholarship of teaching', *Journal of Higher Education*, 71 (4), pp.476-495.
- Land, R. (2004) *Educational development: discourse identity and practice*. Maidenhead: Society for Research into Higher Education and Open University Press.
- Lave, J. & Wenger, E. (1991) *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Laycock, M. & Shives, L. (eds) *Embedding CPD in higher education*. SEDA paper 123. London: SEDA.
- Lucas, L., Healey, M., Jenkins, A. & Short, C. (2007) 'Academics' experiences and perceptions of 'research' and 'teaching': developing the relationship between these activities to enhance student learning within different disciplines and institutions.' *Research Report to Higher Education Academy*, York. Available at: http://www.heacademy.ac.uk/resources/detail/publications/academics_experiences_and_conceptions_of_research_and_teaching, [Accessed 31st March 2010].
- Macfarlane, B. (2004) *Teaching with integrity: the ethics of higher education practice*. Abingdon: RoutledgeFalmer.
- Martin, E. (1999) *Changing academic work*. Buckingham: Open University Press.
- Martin, E., Benjamin, J., Prosser, M. & Trigwell, K. (1998) 'Scholarship of teaching: a study of the approaches of academic staff', in Rust, C. (ed.) *Improving student learning: improving student learning outcomes*. Oxford: Oxford Centre for Staff and Learning Development, Oxford Brookes University.
- Martin, E., Prosser, M., Trigwell, K., Ramsden, P. & Benjamin, J. (2000). 'What university teachers teach and how they teach it', *Instructional Science*, 28, pp.387-412.
- McKernan, J. (1996) *Curriculum action research*. 2nd edn. Abingdon: RoutledgeFalmer.
- McNiff, J. & Whitehead, J. (2003) *All you need to know about action research*. London: Sage.
- Neumann, R. (1994) 'The teaching-research nexus: applying a framework to university student' learning experiences', *European Journal of Education*, 29 (3), pp.323-339.
- Nicholls, G. (2005) 'New lecturers' constructions of learning, teaching and research in higher education', *Studies in Higher Education*, 30 (5), pp.611-625.
- Norton, L. (2009) *Action research in teaching and learning: a practical guide to conducting pedagogical research in universities*. London: Routledge.
- O'Brien, M. (2008) 'Navigating the SoTL landscape: a compass, map and some tools for getting started', *International Journal for the Scholarship of Teaching and Learning*, 2 (2). Available at: <http://www.georgiasouthern.edu/ijstol> [Accessed: 29 March 2010].
- Palmer, A. & Collins, R. (2006) 'Perceptions of rewarding excellence in teaching: motivation and the scholarship of teaching', *Journal of Further and Higher Education*, 30 (2), pp.193-205.
- Pearson, M. & Brew, A. (2002) 'Research training and supervisor development', *Studies in Higher Education*, 27 (2), pp.135-150.
- Prosser, M. & Trigwell, K. (1999a). 'Relational perspectives on higher education teaching and learning in the sciences', *Studies in Science Education*, 33, pp.31-60.
- Prosser, M. & Trigwell, K. (1999b). *Understanding learning and teaching: the experience in higher education*. Buckingham: Open University Press.
- Ramsden, P. (1992) *Learning to teach in higher education*. London: Routledge.
- Ramsden, P. & Martin, E. (1996) 'Recognition of good university teaching: policies from an Australian study', *Studies in Higher Education*, 21, pp.299-315.
- Schön, D. (1984) *The reflective practitioner: how professionals think in action*. Aldershot: Basic Books.
- Sharpe, R. (2004) 'How do professionals learn and develop?: implications for staff and educational developers', in Baume, D. & Kahn, P. (eds) *Enhancing staff and educational development*. London: SEDA/RoutledgeFalmer.
- Shulman, L. (1993) 'Teaching as community property', *Change*, Nov/Dec, pp.6-7.
- Somekh, B. (1995) 'Teacher research: methodological and empowerment issues in practical research for improved teaching and learning', *British Educational Research Journal*, 21 (3), pp.339-355.
- Trigwell, K. (2003) *Scholarship of academic development: a Boyerian Perspective*. Paper presented to SRHE/SEDA conference on 'The scholarship of academic and staff development: research, evaluation and changing practice', April 9-11.
- Trigwell, K. (2005) 'Teaching-research relations, cross-disciplinary collegiality and student learning', *Higher Education*, 49, pp.235-254.
- Walker, M. (2001) 'Action research for equity in teaching and learning', in Walker, M. (ed) *Reconstructing professionalism in university teaching: teachers and learners in action*. Buckingham: Society for Research into Higher Education and Open University Press.