Universities as centres of non-learning
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It has been claimed that one of the overriding purposes of the scholarship of teaching movement is to make more visible what teachers do to make learning happen. The authors of this article are critical of the literature on the scholarship of teaching for not having made more progress towards this aim. They support these assertions through analysis of recent literature and consultation with academics teaching in a variety of disciplines. The weakness in the prior literature is addressed by a proposal to augment a model of scholarship of teaching by providing a tool that can be used by teachers to make explicit the central concept of pedagogic resonance – the bridge between teacher knowledge and student learning. This bridge, spanning the divide between teacher and student, can be made visible through the application of mapping techniques. However, the application of the concept mapping methodology reveals a strategic learning cycle in which teachers and students appear to be complicit in the avoidance of engagement with the discourse of the discipline. The perceived utility of this strategic cycle may subvert any attempt to develop scholarship in university teaching, and may lead consistently to a non-learning outcome for students and teachers – a phenomenon that has previously been largely ignored.

Introduction

In this article, we set out to describe teaching and learning at university in terms of an exchange between teachers and their students. We have uncovered the nature of this exchange through the qualitative application of concept mapping techniques that provide a snapshot of the active structure of student and teacher knowledge. Where experts (teachers) only disclose unanchored fragments of their understanding (as chains of knowledge) the student is excluded from meaningful discourse, except as a passive observer. As a result, the student will adopt surface learning strategies that result in non-learning outcomes. Where expert structures are the currency of the teacher–student interaction, however, teaching is more likely to mirror research activities. Thus, a scholarly approach to teaching is more likely to develop. This is explained below, firstly by considering how this work may contribute to the scholarly development of teaching, before describing the tools and emergent model that may be employed to achieve this.

The scholarship of teaching and learning (SoTL) has been reported by Kreber (2002: 164) as being ‘an amorphous and elusive term devoid of any clear meaning’. Despite her subsequent claims that the scholarship of teaching ‘has gained much clearer contours over the past few years’ (Kreber 2005: 391), it is not evident that such clarity is reflected in the views of university academics (Nicholls 2004, 2005). The scholarship of teaching literature has not yet provided a working lexicon for lecturers, or tools by which colleagues can explore the implications of such work in their own teaching. Also commonly overlooked is the obvious point that learning (i.e. change in understanding), is not always the outcome of teaching episodes. Where no change is evident, the outcome may be described as non-learning (Jarvis 1992).

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Non-learning outcomes are often neglected in the wider literature describing processes of teaching and learning at university level (Hay 2004). For this reason novice readers of the higher education literature can be forgiven for gaining the impression that all experience leads to learning all of the time. It does not, and most of us often fail to learn even where we might. The only model of learning that provides a theoretical framework for this is that of Jarvis (1992). Jarvis’s model distinguishes learning from non-learning outcomes, and suggests routes to non-learning that are a consequence of presumption, non-consideration or rejection (see Jarvis, Holford and Griffin [1998] for a detailed discussion). To construct his model, Jarvis used the autobiographies of learning from 150 adults (Jarvis 1993). His model suggests that people may experience situations (including the formal situation of the classroom) in ways that lead to reinforcement without change (non-learning), or to personal change and experience (learning). The ways in which these outcomes are arrived at are a consequence of the routes taken through processes of memorisation, evaluation, reasoning, reflection and practical experimentation. There are nine routes in all (of which three comprise non-learning and six are indicative of meaningful personal change). Learning (where it does occur) has been divided by Jarvis (1992) into outcomes described as reflective (using practice, evaluation and reasoning to achieve change) and non-reflective (relying largely on memory).

Jarvis’s model has antecedence in the work of Kolb (e.g. Kolb and Fry 1975), but it is amenable to testing in ways that Kolb’s learning cycle is not. It also offers important insights into teaching and learning processes. First, it provides a definition of learning (or non-learning) that is amenable to empirical measurement. To Jarvis, learning is change, and this can be measured by testing individuals’ conceptions before and after a teaching intervention, for example. Change (or the lack of it) can, therefore, be used to discriminate between learning and non-learning outcomes. Recently this has been done by Hay (2007) using concept mapping activities to show that, just as Jarvis suggests, non-learning outcomes can be very real end-points for students, and these may be rewarded by an assessment regime that fails to discriminate. Non-learning is, therefore, not synonymous with failure. Second, where learning does occur, Jarvis’s approach provides a framework for the description of learning quality (reflective versus non-reflective learning for example). This does not have the same utility for measurement as the learning versus non-learning distinction, however. It does describe the underlying processes in non-trivial ways, even if these are not different end-states. Third, it is predictive of learning behaviours and teaching activities that will promote non-learning and reflective or non-reflective outcomes accordingly. Memorisation, for example, will lead to non-reflective change unless it is supported by processes of reflection and evaluation. It may even offer a route back to non-learning, presumably when that which was committed to a short-term memory is forgotten.

Where is the SoTL literature leading us?
A review of the published literature on the scholarship of teaching provides consensus that the debate was ignited by the publication of Boyer’s (1990) Scholarship reconsidered. Further investigation of this literature suggests that the continued search for meaning has brought about discussion, but not necessarily widespread understanding. As an example, we took a sample of 13 academic articles published between 2000 and 2004 relating to the scholarship of teaching. These were identified from a simple search within the ERIC database (undertaken in May 2006), in which we looked for peer-reviewed journal articles that had a focus on the scholarship of teaching. This was not intended to be an exhaustive or systematic review of the literature and we are aware that such a search does not pick up every relevant reference. Such a search illustrates the resources that are likely to be found by new academics, keen to expand their understanding of teaching and learning issues within higher education. A range of methodologies are uncovered,
some literature based, others using original data. The articles are broad in range, from those reviewing the literature (i.e. Badley 2003; McGrew & Mennin 2000), to those drawing data from academic staff (i.e. Lueddeke 2003), or from students (i.e. Glennon 2004), and those surveying institutional information (i.e. Macfarlane & Ottewill 2004). Four articles are literature based only and provide no original data (see Table 1 for further details).

The conclusions drawn from these 13 articles about the scholarship of teaching bring forward a range of different perspectives. What appears to be clear is that there ‘is considerable variation in how academics from different disciplines prefer to approach the scholarship of teaching’ (Lueddeke 2003: 224). Although Kreber (2003) broadly agrees with these sentiments, she adds that more experienced staff have ‘reached strong consensus on many features of the scholarship of teaching’ (119). Such a view is, however, challenged by Nicholls' (2004) research of experienced staff, who, she argues, ‘were very unsure as to the meaning of the term scholarship of teaching or scholarship in teaching’ (40). It seems that in the years since Boyer initiated discussion about the conceptualisation of the scholarship of teaching, much has been talked about but little consensus arrived at. Arguably this debate has led to little real impact upon the practices that dominate university teaching.

**Participant data**

To investigate whether the interpretations provided since Boyer have made any impact on understanding, a short study was undertaken with a cohort of academic staff, each with less than three
years’ teaching experience. As part of an induction session onto a programme aimed at enhancing their teaching (Postgraduate Certificate in Academic Practice – PGCAP), these academics were asked to define the ways in which they believed teaching was a scholarly activity. Fifty-five responses were received. Of these, 11 were unable to articulate a view, and one stated, ‘I’m not sure what this means’. Using the constant comparative method (Strauss and Corbin 1997) to draw out themes from the statements provided, it became clear that, of the 44 who did respond positively, no universal theme emerged to explain what the scholarship of teaching meant. The most common response, which Nicholls (2004) found with more experienced staff, was that the scholarship of teaching could be defined in terms of research and teaching being integrated so that they inform one another. Of the 19 themes that emerged, only this notion and two others received more than two mentions. The integration of teaching and research was mentioned by 25% (14) of respondents, and the transfer of information and knowledge of the content being taught were both mentioned by 15% (8).

Among the responses relating to research and teaching being closely integrated, two perspectives were included. The first related to research into teaching of the discipline, and the second research into a greater understanding of teaching. The confusion between the two appeared to be at the crux of the comments, and also reflected much that has been reported in the papers reviewed earlier. The scholarship of teaching is interpreted by some as being specific to the context of the discipline within which the individuals teach and research. For others it is seen as being broader and corresponding to teaching as a separate notion.

Interpreting the scholarship of teaching
Trigwell et al. (2000) attempted to contextualise the scholarship of teaching, suggesting that there are five qualitatively different, hierarchical interpretations of the scholarship of teaching. These move from what the teacher does to a focus on student learning. According to Trigwell they differ in four dimensions that can be summarised as follows: the source of information teachers draw upon; the focus of their reflection; the nature and extent of their communication of insights; and their conceptions of teaching and learning. The model put forward suggests that, to engage in higher order activities within the scholarship of teaching, academics are required to: consult discipline-specific literature on teaching and learning, focusing reflection on specific areas on one’s practice, focusing teaching on students and learning, and publishing results of teaching initiatives through peer review mechanisms. As a consequence, academic staff can engage in the scholarship of teaching to varying degrees.

This work suggests that more research is required if the scholarship of teaching is to have clear, distinct and definitive meaning. It is a concept that can have powerful meaning, but its present lack of definition is causing confusion within the community. It is this confusion that we are addressing here by augmenting an existing model of the scholarship of teaching in a way that will empower academics to take ownership of it within their own disciplines, as discussed by Huber and Morreale (2002), using language that will increase its credibility.

Key points from Trigwell and Shale
Trigwell and Shale (2004) have stressed a number of key points that need to be addressed by a model for the scholarship of teaching. These are highlighted below, annotated with a commentary showing how they point the way to the appropriateness of concept mapping techniques to help make them explicit.

Trigwell and Shale stress the importance of ‘collaborative meaning-making’ and the ‘dynamic’ nature of engagement with students:
It is the quality of awareness that is evoked in collaborative meaning-making with students that defines the quality of a teacher’s response to the teaching situation. It is this evoked awareness – the dynamic, reciprocal, fluid engagement with students – and related action that we must seek to capture if we are to truly represent student-focused teaching in an analysis of the scholarship of teaching. This evoked or relational awareness/action is what we call pedagogic resonance. (532)

The reference to collaborative meaning-making resonates strongly with the human constructivist view of teaching and learning (e.g. Mintzes, Wandersee, and Novak 1997). This in turn provides the theoretical foundations for concept mapping techniques (Novak 1998; Novak and Canas 2006), both drawing heavily from Ausubel’s assimilation theory of learning (Ausubel 2000). Engagement with students requires a way of providing a record which can illustrate its dynamic nature. The dialogue between teacher and student can be described, monitored and recorded using mapping tools (Kinchin 2003) that can be used by the teacher to reflect on his/her teaching and by the student to reflect upon his/her learning and conceptual development (e.g. Gravett and Swart 1997).

Trigwell and Shale (2004) stress the ‘quality of student learning’, i.e. not how much the student knows, but how that understanding is structured:

If the aim of the scholarship of teaching is to enhance practice in ways that make a difference to the quality of student learning, we must include in our conception of it an adequate approach to the cultivation and exercise of pedagogic resonance. (532)

This examination of qualitative change has been precisely the focus of recent research into the applications of concept mapping techniques (Hay 2007; Kinchin, Hay, and Adams 2000), that have been undertaken with the explicit aim of enhancing practice. The key importance of ‘visibility’ is stressed by Trigwell and Shale:

If one of the overriding purposes of the scholarship of teaching is to make more visible – so that it may become the subject of public discourse and assessment – what teachers do to make learning possible, then we need to be able to include more pedagogic resonance in the equation. (533)

Concept maps are possibly one of the best tools to increase the visibility of complex ideas to facilitate discussion. The model presented by Trigwell and Shale (2004) considers many of the key elements that would be considered to be necessary to construct a scholarship of teaching, but the links between these elements are not elaborated (Figure 1). We accept that we have taken a narrow view of SoTL within this article, but, as most of the academics in our sample (described above) possess little or no working definition, our focus on the aspects concerned with quality of communication between teachers and students seems a good entry point from which wider issues may be explored subsequently.

Tools for visualising pedagogic resonance

Whilst expert knowledge structures typically exist as highly integrated networks of ideas with explicit linkages and a clear hierarchy (Bradley, Paul, and Seeman 2006; Novak 1998), the structure that is typically transmitted during teaching is very linear in character, reflecting the sequential nature of teaching activities (Martin 1994). Therefore a cycle of knowledge transformations is required if the student is to reconstruct a knowledge structure that shares sufficient attributes with the expert structure to support dialogue between student and teacher (Kinchin and Hay 2007). Such a cycle is depicted in Figure 2. The integrated expert structure is reorganised to produce a teaching sequence. The student then reconstructs his/her understanding from what is available. Without suitable scaffolding, students may select inappropriate organising concepts (often taken from the early part of a teaching sequence – Kinchin, DeLeij, and Hay 2005; Pearsall,
Without access to the expert structure, meaningful learning is less likely to occur. Such support can be offered to the student by using ‘expert skeletal’ concept maps to scaffold learning (Novak and Cañas 2004), and is likely to increase the level of pedagogic resonance and reduce the mismatch between teacher and student.

Comparison of the expert structure and the student reconstruction in Figure 2 highlights a number of indicators of the expert–novice transition. With respect to the key organising principle at the top of the teaching sequence (concept ‘E’), the student reconstruction can be seen to be an inverted version of the expert structure – a phenomenon that has been noted previously (Kinchin 2001). The teacher may, with considerable justification, choose to start a teaching session with any of the ideas presented within the expert framework. The starting point may reflect the needs of the audience and/or the ideas which help to link with previous teaching sessions. The use of a familiar example (e.g. ‘E’) may be seen by the teacher as a way to help the students gain entry to the discourse on the subject.

The overarching idea held by the teacher (concept ‘A’) is placed at the bottom of the reconstruction by the student who, in contrast, has selected a minor concept to be placed at the top. This is because students will often choose a specific example to govern their knowledge structures (rather than a ‘big idea’), particularly if that example is presented at the beginning of a teaching sequence. In addition, the student reconstruction exhibits no cross-linking of ideas. In comparison with the novice/student structure, the expert structure depicted here (in Figure 2) contains twice the number of links for the same number of concepts. Knowledge of this transformation cycle for any particular context can address each of the elements presented in Figure 1 by Trigwell and Shale (2004). The relationships between them are summarised in the annotations in Figure 2.
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Enhancing the SoTL model

The cycle in Figure 2 can be modified by the insertion of discipline-specific examples of expert structures and possible teaching sequences. In this way we can increase the pedagogic resonance between the idea of a scholarship of teaching (as held in the specialist literature) and the understanding of this concept by novice (and experienced) teachers within higher education. This will help to overcome the barrier that some colleagues perceive to be created by ‘educational jargon’ that lies outside of colleagues’ core vocabulary on teaching and learning – an issue the SoTL literature has clearly failed to address. It seems inevitable that those active in disciplinary pedagogical research and consulting discipline-specific literature (as recommended by Trigwell et al. 2000) will find reasons for modifying any general model of scholarship of teaching to increase resonance with the conceptual structure of the discipline (Huber 2002). For example, Banchoff and Salem (2002) have described how much consideration of pedagogy in mathematics has been carried out in private, and is rarely made public, as a result of small sample sizes and informal methodologies. In exceptional instances, such work is publicised within the discipline-specific literature, where the generic idea of subject knowledge and pedagogical content knowledge (Shulman 1986) has been augmented by the additional consideration of ‘mathematical content knowledge’ (Kahan, Cooper, and Bethea 2003) and ‘observational didactic knowledge’ (Margolinas, Coulange, and Bessot 2005). This reframing is intended to enhance its applicability to the subject, and increase

Figure 2. A map of knowledge transformations annotated with the elements of Trigwell and Shale’s model to show how the elements of the model are addressed within the visual representation.
its accessibility among mathematics teachers by acting as an educational trading zone – a space in which ideas about learning and teaching can be shared between disciplines (Mills and Huber 2005). Such trade is not seen as a mechanism to blur disciplinary identities or to sacrifice difference, but may help in the learning of a new vocabulary that helps academics to think and speak more clearly about teaching and learning (Huber and Hutchings 2005). This phenomenon is illustrated later in this article through the use of the terms ‘directional selection’ and ‘stabilising selection’ within Figures 4 and 5. This links back to the disciplinary origins in the biological sciences of two of this paper’s authors (Kinchin and Hay). By taking ownership in this way (as described by Fullan 1991), the disciplines are increasing the pedagogic resonance between the educational developers working within the scholarship of teaching movement and lecturers who are more concerned with disciplinary knowledge.

Implications of mapping knowledge structures
Extensive examination of concept maps produced by students and teachers of all ages (from primary to postgraduate) has shown that their structures can be broadly described as either spokes (where all subordinate concepts link directly to the key idea, but not to each other); chains (where the concepts are arranged in a linear sequence); and nets (where multiple links exist between concepts at all levels in the map) (Kinchin, Hay, and Adams 2000). Consideration of the significance of these three major knowledge structures has resulted in the model proposed by Kinchin and Hay (2007) to explain their complementary roles for teaching and learning in higher education (Figure 3).

The model may be read vertically or horizontally. The vertical dimension explains the characteristics and roles of each of the knowledge structures. The spoke indicates a learning-ready novice, i.e. someone who can acquire new information for later integration without the need for...
radical restructuring of existing understanding (Hay and Kinchin 2006). Unfortunately, many students embark upon their undergraduate studies with firmly established chains of understanding that are incomplete or inappropriate for their new context. Such chains are resistant to development, and so such students are faced with the dilemma of either trying to abandon their existing beliefs or rote-learning the new material as an adjunct to their existing prior knowledge. Therefore, the promotion of initial spoke structures may be a good starting point for many bridging courses or induction programmes.

The chain of appropriate understanding is indicative of our strategically successful learners (students and lecturers). These chains are exemplified by the student who learns comprehensive lists of facts for each topic, and by those students who are well rehearsed in practical activities in such a manner that they know ‘how’ but do not understand ‘why’. Such goal-orientation enables these learners to select the essential information from that which is available, whilst selectively ignoring the rest. This may be seen by some as an efficient way of studying, whilst others could interpret this as a blinkered view of higher education. There is certainly a tension created within the university environment by attitudes towards this kind of strategic approach that may reflect disciplinary differences. For example, in the clinical teaching environment, the development of chains of practice is seen as one of the key aims (e.g. De Cossart and Fish 2005), with the underlying network of understanding left deliberately obscure to the observer (Katz 1988).

The demonstration of highly developed and integrated nets of understanding may be seen as the hallmark of an academic’s expert understanding (Bradley, Paul, and Seeman 2006), for whom the demonstration of expertise is achieved by the accommodation of competing chains of understanding and the selection of appropriate chains to suit particular contexts (e.g. Schmidt, Norman, and Boshuizen 1990). A particular chain of practice from an array held by the expert may be appropriate for use within a particular teaching context. The selection will depend upon the purpose of the session and the level of prior knowledge held by the audience. So, whether teaching is in a lecture theatre or in a clinical setting, the expert teacher will be able to choose which chain(s) to activate from within his/her underlying knowledge framework (Kinchin and Hay 2007).

A horizontal reading of the model suggests a progression in the development of knowledge structures from spokes to nets (via chains). Such a directional development has been observed (Kinchin, Hay, and Adams 2000), though the mechanisms of change are complex and have been introduced elsewhere (Hay 2007). The implication that the development of net structures among students may be the goal of higher education is one that may be contested, particularly where the utility of chains of practice are rated above networks of understanding.

The three knowledge structures (spoke, chain and net) are supported by the three phases of knowledge development described by Pedrosa de Jesus et al. (2006) as: (a) an acquisition phase; (b) a specialisation phase, and (c) an integration phase.

However, a simple linear progression from one phase to the next cannot be assumed. The phases may be employed simultaneously across different regions of a particular knowledge structure (Hay 2007), and so cannot be usefully considered in isolation from each other.

The model not only helps to describe teaching within the disciplines, but may also be applied to lecturers’ developing constructions of the scholarship of teaching as it relates to their teaching context. Trigwell and Shale (2004) cite Ryle (1949), who proposed that the most meaningful measure of a person’s understanding of a concept is what that person is able to do with it. The data described here on the scholarship of teaching suggest this is very little at present. Tackling SoTL using discipline-specific language acknowledges Guskey’s (2002) view of professional development, in which changes to practice are encouraged to provide a context in which changes in belief may be subsequently encouraged. Therefore, the scholarship of teaching may be evaluated by the ability of a colleague to reflect upon the interactions depicted in Figure 3, and to act to implement its development within a changing context. This is with the aim of increasing
pedagogic resonance by creating overlap between the knowledge frameworks of the lecturers within the disciplines with those held by educational developers (Kelly and Green 1998). Eventually this may lead to a shared conception of SoTL.

Our combined observations of university teaching (over 400 structured observations with new lecturers) suggest that classroom practice is dominated by teaching that promotes chain thinking. This is summarised in the sketch graph superimposed upon the model within Figure 4 (upper half), to indicate the relative proportion of teaching episodes that would be likely to evoke spoke, chain or net knowledge structures. This shows the factors that may exert stabilising selection pressures (indicated by the arrows) upon teaching in higher education to maintain a focus on the reproduction of chains of understanding. On the one hand, there are factors concerned with the teacher’s classroom practice. A lack of teaching experience creates a level of anxiety among teachers that militates against innovative practice and encourages teachers to play safe. Many teachers also hold a fragmented view of the field, either because they are teaching one or two ‘guest spots’ within a lecture course without really appreciating how their lectures contribute to the entire module, or because they are teaching outside of their specialist area.

On the other hand, there are factors that stem from the department or from the wider institution. These include the pressures of work felt by staff members trying to juggle their teaching commitments with their administrative duties and research activities. The examination regime may be seen to reward rote learning and regurgitation of materials, providing a disincentive for active engagement in learning. Finally, the dominant culture within a research-led department may be to push new colleagues to spend more time on their research than on their teaching preparation, as the former is seen to be more prestigious than the latter (Young 2006).

The result overall is a cycle of teaching–learning in which chains of understanding are exchanged between teachers and students. Accurate reproduction of these chains is rewarded to such an extent that change (the defining characteristic of learning for Jarvis 1992) is effectively discouraged. In this way, teachers and students are complicit in a cycle of non-learning (Jarvis 1992) that allows the maintenance of an ‘economy of practice’ resulting from an audit culture (Stronach et al. 2002) that maintains the status quo (Figure 4 – lower half). Gardner and Boix-Mansilla (1999) have identified how students and teachers agree to honour the correct answer compromise, when both partners agree to accept certain formulations as evidence of mastery. This helps to maintain the status quo, with both parties employing the tacit rules of an examination game (Miller and Parlett 1974).

One indicator of the tendency towards the reproduction of chains of understanding is the way in which PowerPoint is used within lectures. PowerPoint provides direct insights into the implicit intentions of the teacher (Tufte 2003), and is a good predictor of the style of teaching that will dominate the teaching session (Kinchin 2006). We have used consideration of the teacher’s use of PowerPoint as an entry point for the wider discussion of teachers’ beliefs about their role in the classroom. One outcome of teachers’ active consideration of the SoTL using the model presented in Figure 3 (possibly supported by colleagues from an educational development unit) may be the translation of the graph of the distribution of teaching (Figure 4) to the right, towards network structures (Figure 5). This directional selection requires that teachers have some conception of possible alternative views of teaching and learning. This may be promoted by observing their peers teaching (a complex issue that has been explored elsewhere: e.g. Lomas and Kinchin 2006; Lomas and Nicholls 2005). It also requires colleagues to see themselves as teachers, and for teaching activity to be given due recognition by the institution, possibly requiring educational developers to adopt a role as belief and attitude therapists (as described by Boote 2003).

The result overall of altering the distribution of teaching practices to focus on the development and sharing of integrated knowledge structures would be a cycle of teaching and learning
Figure 4. Stabilising selection pressures will encourage the continuing dominance of linear knowledge structures, i.e. the central strand of the model. These chains of knowledge can be exchanged between teacher and student (lower diagram) without active engagement in the learning process such that no real change in understanding occurs (i.e. non-learning). For details within the underlying model, refer back to Figure 3.
Figure 5. Directional selection pressures applied to the traditional teaching model may help to move teaching and learning towards an appreciation and exploitation of the value of expertise as it is networks of understanding that are involved rather than chains of knowledge, i.e. the right-hand strand of the model. Such a dialogic cycle between teacher and student (lower diagram) would represent a scholarly teaching–learning cycle. For details within the underlying model, refer back to Figure 3.
that promotes expert understanding (Figure 5 – lower half). For this to happen, the teacher must be prepared to share his/her expert knowledge structure with his/her students, and to support a dialogue that will help the students to navigate their personalised journeys from novice to expert. This would support a consideration of teaching from ecologies of practice that stem from professional dispositions rather than from an audit culture (Stronach et al. 2002).

Conclusion
The model shown in Figure 1, proposed by Trigwell and Shale (2004), is presented as linear sets of descriptors, arranged to disseminate a particular view of the scholarship of teaching. The linear structure suggests that it forms the second stage of the transformation cycle (Figure 2), from which academics have struggled (and apparently failed) to construct their own personal views of scholarship of teaching (Nicholls 2005). Their failure may be due to the lack of an explicit underlying expert structure from which the narrative of teaching is drawn (Kinchin and Hay 2007). In the absence of such a foundation, academics have been unable to become active participants in the developing SoTL discourse, and so adopt the role of reluctant observer (e.g. Cameron 2003; Land 2004).

In this article we have been working back through the transformation cycle (from Trigwell and Shale’s linear model) to develop an explicit structure that academics could apply to their own contexts. The result is the application of the generic model represented in Figure 3, which now needs to be applied to teaching within the disciplines, and tailored as necessary to exploit the range of disciplinary styles that may empower the scholarship of teaching movement (Huber 2002). Until this is achieved using discipline-specific lexicons, it would seem that academic staff are unlikely to engage in the discourse of scholarship of university teaching as (it would seem from discussions with the PGCAP participants described above) for many of them it has no perceived utility. This is a non-learning outcome for teachers. We believe application of the model shown in Figure 3 is a step towards the construction of an underlying framework, that can be applied across the diverse range of teaching contexts in higher education, by increasing the pedagogic resonance of the scholarship literature for the academics who might benefit most by the application of reflection upon their practice. By promoting a scholarly cycle of teaching and learning universities will avoid acting as centres of non-learning.

References


