**The Scholarship of Teaching and Learning: Teachers as Students**

Bridging Classroom and Workplace

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**Abstract**

The Scholarship of Teaching and Learning (SoTL) is receiving increasing interest in Higher Education in the UK. Engagement with SoTL is required by a growing number of institutions as a means for academic staff to gain a teaching qualification, from certificate to doctoral level, and to show a commitment to expertise in teaching and learning in higher education. However, academic staff are often asked to engage with SoTL with little structured support. In addition, there is often the assumption, especially in research-intensive departments and institutions, that SoTL is synonymous with research, and peer reviewed publication is the prime example of evidence of engagement with SoTL. In these cases, other SoTL activities may be ignored, or sidelined.

Engagement with SoTL has its own challenges, especially if staff come from a positivistic, quantitative tradition. Staff may feel out of their depth with methodologies and literature which is unfamiliar. Despite being experts in their discipline, they are placed in the role of student once more, which may be uncomfortable for them. This paper will investigate how a group of twenty UK Life Science academics experience engagement with SoTL, what SoTL means to them, and what constitutes SoTL for them in their everyday practice, and their development as practitioners in Life Sciences teaching and learning in higher education. Using semi-structured interviews, the participants discuss the challenges they face engaging in SoTL, and how it impacts on them as academics. The results help us to understand, how staff engage with SoTL at different stages of their career, and the factors that influence how their understanding of SoTL develops. In trying to understand this development, it may be possible to offer more, and better support for staff engaging in SoTL.

**Introduction**

The Scholarship of Teaching and Learning is a contentious subject. Since the phrase “Scholarship of Teaching” was coined by Boyer (1990) more than two decades ago, there is still disagreement as to what defines SoTL (Boshier, 2009), which makes engagement with it difficult. However, with an estimated 25% of academics in the UK now on a “teaching-only” or “teaching and scholarship” route (Times Higher Education, 2008), being asked to engage with SoTL is considered part of the job. SoTL can be used to develop expertise within the discipline (Healey, 2000), or to establish one’s identity as an academic (Bernstein, 2011).

The development of SoTL over the past twenty four years has led to the proposal of a number of models of scholarship. Pertinent to this paper are those of Trigwell, Martin, Benjamin and Prosser (2000), who propose a four dimensional model, comprising knowledge of underpinning literature, reflection on one’s practice, communication to the wider community, and conception of teaching; and Antman and Olsson (2007) who simplify the model into two dimensions of theory and practice, with a diagonal line indicating progression of the integration of both dimensions. Adding to Trigwell et al’s (2000) model, Roxå, Olsson and Mårtensson (2008) insist on appropriate use of theory in SoTL, while Hutchings (2007) warns that engagement with theory may come from many places, including within the discipline.

## Approach

## Earlier statistical work on this topic (Tierney, 2013) revealed that SoTL was perceived as having less power by staff whose involved in the Research Excellence Framework (Higher Education Funding Council for England, n.d.), than those who were not (p=0.047; d=-0.68), the REF being the five-yearly cycle of assessment of the quality of disciplinary research in UK universities. That this difference was measurable was used as a starting point to investigate perceptions of SoTL through semi-structured interviews.

## Interviews

## Twenty participants were interviewed, either face to face, or by Skype/telephone. Each participant was given a copy of their survey results in graphical form prior to the interview. The graph then acted as a mediating artefact (Cole, 1999), facilitating discussion of their experiences of being an academic, and their engagement with SoTL. The interviews were transcribed in full and then analysed. Key statements were identified and then categorised using (1) mention of SoTL, and (2) keywords and identifying themes. The model of scholarship developed by Trigwell et al (2000) was used as a framework to investigate individuals’ development of engagement with SoTL using the four dimensions *Informed, Reflection, Communication* and *Conception* (Fig 1).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Level | Informed (ID) | Reflection (RD) | Communication (ComD) | Conception (ConD) |
| 1 | Uses informal theories of teaching and learning | Effectively none, or unfocused reflection | none | Sees teaching in a teacher-focused way |
| 2 | Engages with the literature of teaching and learning generally |  | Communicates with departmental/faculty peers (tearoom conversations; departmental seminars) |  |
| 3 | Engages with the literature; particularly the discipline literature | Reflection-in-action | Reports work at local and national conferences |  |
| 4 | Conducts action research, has synoptic capacity and pedagogic content knowledge | Reflection focused on asking what do I need to know about x here, and how will I find out about it? | Publishes in international scholarly journals | sees teaching in a student-focused way |

## Fig. 1. Four dimensions of scholarship of teaching (Trigwell et al., 2000, p. 163)

## Transcripts were appraised for the level at which interviewees were engaging with each of the dimensions.

## Findings

## Definition of SoTL

## The definition of SoTL was a source of anxiety and contention for interviewees (Boshier, 2009), who struggled with it. For some of the interviewees, they were unable to provide a definition. For those that did, the definitions reflected the level of engagement that they were at.

“*What I gave you as a definition of scholarship is of course, of my own making, and I think it is quite difficult for people on this pathway not having a proper definition of what it actually is, and what it entails, and so on, and …I found it a bit strange that it wasn't really defined for us for quite a long while, and some people ended up on this pathway without really knowing what it entails, what it is, and even now, people struggle quite a bit, and I think that's something that should be addressed more generally*.”

The lack of an agreed definition for SoTL is a source of frustration for staff, both from the perspective that they need a definition in order to know what they are doing, and also because the literature has abundant examples of definitions of SoTL (Antman & Olsson, 2007; Roxå et al., 2008; Trigwell et al., 2000).

## SoTL as practice

## Interviewees defined SoTL as an active process, and something to be implemented in their practice as teachers within Higher Education. SoTL was used to “*take over modules and improv*[e] *them*”. Interviewees who confined their discussion to SoTL as practice identified themselves as feeling uncomfortable with SoTL. This unease was not always with academics new to teaching, but included experienced academics. Their discussion of SoTL centred around practical interventions, based on student opinion, or other examples of practice. These interviewees reflected on their practice (RD 3), but the extent to which they were able to respond was defined by their engagement with underpinning theory, which corresponds to ID 1 or 2, the use of informal theories of learning, or using literature in a general way. Their conception of dissemination, when they did talk about it, was in terms of talking to other people about works (Com 2) and tended to concentrate on what they did as teachers as influencing student ability to learn (Con 2).

## “*Very pragmatic. I take notice of feedback from students, and I’m always willing to change things and occasionally I will try something new, but it’s not underpinned by any theory, it’s just try it and see how it works.*”

## For interviewees talking about SoTL as practice, this appears to be the way in which early interaction with SoTL occurs. This makes sense, as one’s introduction to SoTL is usually when attending the Postgraduate Certificate in Higher Education (PGC), and when an individual’s focus is on learning how to teach. For more experienced academics, this level of engagement may be due to having started teaching at a time when the PGC was not compulsory, and missing out on an early opportunity to engage with SoTL, or a lack of encouragement to develop in that area.

## SoTL as Research

## Interviewees talked about SoTL as Research both as novices and experienced academics. Many of the interviewees had come to a teaching post from a research background, and this was reflected in the language that they used when describing their approach to SoTL. Terms such as “hypothesis-driven”, “impact” “evidence”, “formalised” and “data” were used. Using Trigwell et al’s (2000) model, interviewees who talked about SoTL as Research tended to have a more developed understanding of SoTL: referring to the literature when planning a piece of research or looking for an answer to problems (ID 3) and reflecting on the wider implications of SoTL both in, and outside of their practice (R 3).

**“***I guess for me personally, the scholarship in the teaching and scholarship pathway is that I look into the impact of what I'm doing, and that's quite a strong concept for me, and that's something that I'm trying to get across, the value of that to other people as well …meaning that what we do in education, in teaching, we shouldn't just do as it always has been done, or on a hunch, or whatever we fancy or whatever is easiest, but we should look into how effective it actually is. …we need to reflect on what we're doing, are the students really learning something, or everything's fine and that's it. I think we need to look into the actual effect that our teaching has but coming from the other side, we also, I think, should look at the pedagogical literature and see what other people have done, and when there's evidence there that's something that's effective so that's it in a nutshell, what I think of scholarship*.**”**

There was disagreement amongst interviewees as to the relationship between disciplinary research and pedagogical research, although this may be related to the type of Life Science research background the individual comes from (Becher & Trowler, 2001). For some, there was no connection between SoTL research and disciplinary research.

“[SoTL]*’s not related to traditional research, but it is related to research of a teaching and learning ilk, if you include diversifying through e-learning.*”

While for others, there were connections between the two.

“*There are some differences* [in SoTL research] *but I think there are more similarities than differences, particularly with the kind of research that I do*.”

Life Sciences, while talked about as one cognate area, is a range of disciplines ranging from “hard” science, such as biochemistry, to “softer” areas, such as public health or conservation. The methods and methodological approaches dominating within these areas is likely to influence how an individual both views, and approaches SoTL research, resulting in differing opinions.

Interviewees who thought about SoTL in terms of research, also thought about communication in terms of publishing papers (Com 4).

“*I suppose with the scholarship a bit more, thinking about writing up papers about research and teaching. Or teaching and learning.*”

However, there is a caveat to this observation. Trigwell et al’s (2000) criteria for Com 4 is “*Publishes in international scholarly journals*”. For most of the interviewees, publishing papers would not be in internationally recognised journals for education, but for more locally produced journals, reducing the level of engagement. In the model, although ID 3 is “*Engages with the literature; particularly the discipline literature*”, there is no equivalent “*publishes in discipline-specific SoTL literature* ” for the communication dimension. Even so, Com 3 seems more appropriate in this circumstance.

Despite the more developed view of SoTL as research, interviewees tended to still hold a teacher-centred conceptual model (Con 2). Although they acknowledged the importance of including students in their view of SoTL, it was still in the context of what they, as teachers, did to promote learning, rather than what students did.

**SoTL as Identity**

The third perception of SoTL was as that of Identity. Interviewees who included SoTL as Identity in their discussions, thought about the broader implications of the importance of SoTL. Rather than perceiving SoTL solely as something to do (practice) or as an extension of research, these individuals discussed SoTL as an over-arching principle of their identity as a teaching academic in UK Higher Education. Interviewees who talked in these terms were individuals who had invested heavily in SoTL in terms of expertise and career progression, synthesizing their experience of SoTL as practice and SoTL as research, resulting in a more complex view of SoTL. These individuals take on responsibilities at higher levels, editing journals, giving conference papers, writing journal articles and mentoring others.

“*I see that as scholarship of teaching and learning, so I think everything that I’ve done as an academic is under the umbrella of the scholarship of teaching and learning, is about thinking and particularly in evaluating experiences and trying to collect data and do things in a hypothesis related way in all of my teaching activity and I guess I didn’t know that for a long time… I think deeply about hypothesis related research around trying to prove the impact of interventions on student engagement and student learning and that’s the kind of area that I think of, and if that’s an area of scholarship then, yeah, that’s what I do.*”

## It is interesting to note that even at this level, interviewees still use the language of science to talk about their experience with SoTL. These people are categorised as “provocateurs” by Land (2004); individuals who have expertise in educational development, but who still identify with their discipline, following a SoTL “Trajectory 2” (Roxå, Olsson, & Mårtensson, 2007), acting within the local context to try to effect change in teaching and learning. The position of these pedagogical/discipline experts was seen by some as a vital component of a Life Sciences department, but one that was not being implemented.

**“***I do think that the value of the educational research in a disciplinary focus is undervalued and I think discipline specific researchers could benefit from people who know about educational research to help them in curriculum development and I don’t see that at the moment*.**”**

## In terms of Trigwell et al’s (2000) model, these people are synoptic in their approach to literature (ID 4), they reflect on the wider context of Higher Education (R 4). In terms of communication, they recognise a variety of ways of communication; conference presentations, workshops, journal papers, book chapters, which would be considered Com 4. In terms of their conception of scholarship there is a move towards a student-centred model (Con 3) although much of the interview discussion is around what interviewees do as teachers/SoTL researchers.

## Barriers to development

## Development of understanding of SoTL and subsequent engagement with it is subject to barriers. Both “SoTL as practice” and SoTL as research” is discussed by academics new to teaching and with many years’ experience. There is no correlation between years’ teaching and development of engagement with SoTL, and so the following section of the paper will look at two main factors which impede this development, termed “internal” and “external”.

## Internal factors

## Internal factors which influence development are those which come from the individual. Interviewees expressed frustration at the language used by educational researchers, the methodologies and research methods employed, and the educational literature. These frustrations echo the opinions of Woodhouse (2010) and Bernstein (2011) who argue that practitioners with high teaching loads do not have the time or resources to emulate full time educational researchers.

## “*For a lot of us scientists and mathematicians, we just went – what? What are you talking about? You might as well be talking Chinese. I haven’t got a clue what you’re talking about, you know.*”

## “*I think it was getting to grips with qualitative research… drawing out textual themes, I mean, I can do it, but I don’t necessarily think that I find it easy.*”

## Both Bernstein and Roxå et al (2007) argue that there is no need for every teacher to be an expert educational researcher, but that it is important to engage in scholarship in a thoughtful and rigorous way (Bernstein, 2011) and that there is a suitable proportion of teachers in a local environment to facilitate scholarly change in teaching and learning practice (Roxå et al., 2007). There is also the paradox of SoTL, that every hour devoted to pedagogical research is an hour away from teaching students.

“*The paradox, of course, being engaged in pedagogical research also takes you away from the students, doesn’t it? So if you would try to progress your career by applying for this grant or that grant or this scheme or that scheme, you’re again taking yourself away from the students, aren’t you?*”

The interviewees are reflecting a natural diversity in the way individual teachers engage with SoTL. For some, engagement will be nothing more than a means to improve their teaching, which they will pass on to their colleagues, while for some, they seek to deepen their engagement to the point where their identity is transformed.

## External factors

## External factors expressed by interviewees included the lack of value and support of SoTL, the impact of the REF and Administration on teaching academics.

## Lack of value and support was expressed at the peer, departmental and institutional level. Interviewees expressed frustration at the status of SoTL being “a hobby” or a “cottage industry”. Peers who were engaged in disciplinary research were not receptive to discussing SoTL, and any discussions taking place were often informal.

**“***The problem is that when I’m talking about scholarship with colleagues, it tends to be on an individual basis, in the doorway of their office, cos they won’t normally let me in, and so you’re basically trying to drip feed this stuff on an individual basis at the beginning or the end of a conversation and you’re not always sure that they’re listening*.**”**

## Although SoTL was seen as something to be engaged with to get reward, recognition and promotion (Cashmore, 2009), it was felt that this was instrumental, and that the strategic importance of SoTL was being missed by institutions.

## “*I think the one thing that I find frustrating with the university is that they kind of see* [SoTL] *as a little optional extra to be done when it sort of suits them, but they don’t understand how much it links into both teaching, but learning experience and recruitment as well.*”

## The value of SoTL in comparison to disciplinary research was also questioned.

**“***I think that the senior management and leadership of the university pay lipservice to* [SoTL]*. It’s not valued particularly highly. We have a new workload allocation model here and traditional research is valued several times fold any kind of pedagogic research or scholarship of teaching and learning*.**”**

The undervaluation of SoTL compared to disciplinary research was felt particularly keenly in relation to the REF, where it was felt that Research academics were avoiding teaching and administration duties in order to concentrate on their publications.

## “*People are using REF as an excuse to say no to certain teaching admin jobs, people are using it to try and rein back some of the time they’re putting into teaching, so there are very few people who are research active who are prepared to take on significant admin roles, and so things like year leads or Head of Teaching*”.

These statements serve to uphold my original findings (Tierney, 2013) that SoTL is perceived to have less power by academics engaged with the REF. The reasons for this appear to be that Research academics have the power to refuse teaching and administrative work in favour of concentrating on more prestigious research, with Teaching academics having little power to refuse work being put upon them.

## Discussion

## Interviewees have demonstrated their engagement with SoTL, according to Trigwell et al’s 2000 four dimensional model. However, this engagement is not a linear progression through all four dimensions. While reflection may be well developed in an individual, this may not be matched by their engagement with the literature, their level of communication of their work, or the development of their conceptual model of learning. In terms of Antman and Olsson’s (2007) two dimensional model, while an individual’s practice may be well-developed, this is not matched by the integration of theory, resulting in a line of progression which has a shallow slope (Fig. 2.).

|  |  |  |
| --- | --- | --- |
| Theory |  |  |
|  |  |  |
|  |  | Practice |

## Fig. 1. Theory-Practice 2 dimensional model with projected SoTL development (solid black line) and actual development (dashed red line). Adapted from (Antman & Olsson, 2007, p. 288)

## However, there is evidence to indicate that the lag in the development of these three dimensions may be linked to external factors. The value that institutions place on SoTL, and the effect of the REF all take their toll on engagement with SoTL. It appears that the role of the Teaching-only academic is to take on teaching and administration to the extent that they do not have any time with which to engage in scholarship. The academic element of the Teaching-only role, that of SoTL, is being neglected by the necessity of day to day teaching and administration. “Permission” to engage with SoTL may lie with an individual Head of Department, rather than being part of institutional culture. Whilst an increasing number of individuals are categorised as “Teaching-only” academics, this often overlooks their potential to contribute to higher education research (Times Higher Education, 2008). This, in addition to a fear of the literature and methodologies used, make meaningful engagement with SoTL a challenge. However, individuals do engage with SoTL, but this is a longitudinal process, with difficult decisions to be made regarding career development as they struggle with the discipline and education.

## Conclusions

## There is a need for careerwide support for teachers in higher education. What form this will take is unknown, however, it needs to include support to engage with and understand the literature, language and methodologies of SoTL, support to develop as a researcher, and support to communicate findings widely, and in various formats. If that support were in place, engagement at the high end of all four of Trigwell et al’s (2000) dimensions would be more achievable.

## At a departmental level, there is a need for a critical appraisal of workload and of priorities. While it is acknowledged that there are tensions between Research and Teaching (SoTL) (Drennan & Beck, 2000), this study has also highlighted that Administrative loads also impact on SoTL, where SoTL, again, is the loser. Ironically, many of the problems faced by UK universities today could be better tackled if staff were more engaged and informed by pedagogical research (Bernstein, 2011; Roxå et al., 2007), therefore it would benefit any department that made a concerted effort to find ways to support Teaching academics in the way they support Research academics.

## Teachers in Higher Education have become the “squeezed middle” of academia as they are subject to pressures from research and administration – it is false economy to give secretarial work to academic staff and departments might consider employing secretarial support at programme level, freeing Teaching academics to develop as professional Teacher-Researchers.

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