

The Scholarship of Teaching and Learning (SoTL): A review of literature and introductory guide to the field

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Abstract

A still growing and transformative ‘movement’ in Higher Education, the Scholarship of Teaching and Learning (SoTL) has been recently defined as an essentially collaborative, research-led and reflective form of professional development and practice with the strategic potential to inform policy and capacity building at local and institutional levels, while also addressing the diverse and complex landscape of the Higher Education sector operating within the UK and other countries around the world. Maturing as a field from roots established over 30 years ago in the 1990s, and increasingly referred to almost synonymously as pedagogical research, SoTL has a great deal to offer those colleagues looking to engage with the enquiry-based discourse and approaches involved, helping satisfy the increasing demand for applied pedagogical and professional knowledge, and making a positive contribution to the Teaching Excellence Framework (TEF). In this way, SoTL challenges the more elevated status of research upon which it both draws and informs to validate the legitimacy of its claims. Though not an exhaustive review of SoTL literature, which is far too vast for that, this article serves to provide a guide for those colleagues including senior managers approaching SoTL for perhaps the first time and who need a broad and up-to-date introduction to the field including where best to look for more.

Keywords: Scholarship of Teaching and Learning, SoTL, Transformational change, AdvanceHE, TEF, Pedagogical research

Introduction

According to most authors, the Scholarship of Teaching and Learning (SoTL) remains a growing and enduringly important if somewhat elusive ‘movement’ or field of enquiry, with recognition as a transformational change agent for the Higher Education sector as a whole. Increasingly referred to almost synonymously as pedagogical research in certain quarters (see *Challenge, critique and insight* later), SoTL is acknowledged as emerging from the four-fold classification of the scholarship of discovery, teaching, integration and application presented in the

seminal work of Boyer (1990) aimed at improving the 'professoriate'. Enhanced by the more developed notion of scholarship as 'community property' for the purposes of peer review and evaluation in the work of Shulman (1993) and Hutchings and Shulman (1999), Trigwell et al. (2000) were among the first to articulate the very essence of SoTL in its most basic form:

'[Lecturers] who are more likely to be engaging in [SoTL] ... seek to understand teaching by consulting and using the literature on teaching and learning, by investigating their own teaching, by reflecting on their teaching from the perspective of their intention in teaching while seeing it from the students' position, and by formally communicating their ideas and practice to their peers ... to allow such scholarship to inform practice ... teaching, and thus learning, is improved.' (164)

Over 20 years on, the evolving nature of SoTL arguably reflects nothing more than the evolving nature of Higher Education itself, including, for example, a rise in teaching-only appointments and teaching-led institutions, an emphasis on teaching quality and quality assurance, and student engagement in all of its many and varied forms. In the UK as a result, SoTL has a great deal to offer those colleagues looking to the discourse and sorts of enquiry-based approaches involved, thereby helping satisfy an increasing demand for applied pedagogical and professional knowledge, as well as making a positive contribution to many of the matters associated with the Teaching Excellence Framework or TEF (Pearce 2019). In this way, SoTL challenges the more elevated status of research upon which it both draws and informs to validate the legitimacy of its claims.

The purpose of this article is to provide an introductory guide for those colleagues including senior managers approaching SoTL for perhaps the first time and who need a broad and up-to-date overview of the field, including where best to look for further information and resources.

Descriptions, definitions and characteristics?

Over time, SoTL has come to mean different things to different people, with a proliferation of descriptions and definitions often attached to the different institutions and departments across which it is recognised and promoted. Descriptions of SoTL include the scholarship of pedagogy, the systematic study of teaching and learning, the iterative and systematic enquiry into the processes of student learning and experience with the goal of improving those processes, engaging in research regarding pedagogical and curricular design and implementation practices that impact student learning, what constitutes 'good practice' anchored in a solid body of peer-reviewed research, and evidence-based critical reflection on practice aimed at improving practice. SoTL has also been conflated, though not always appropriately, with research-informed teaching, teaching in research mode and action research. Despite the variation, the central elements of SoTL remain relatively consistent: Reflection, criticality and a more 'researcherly' approach to better understanding the

relationship between teaching and learning (Kern et al. 2015). The conflation of terms and the proliferation of descriptions and definitions is not unproblematic, however, with an inevitable confusion over what SoTL is and how SoTL is perceived.

By way of resolution, and drawing on certain aspects of SoTL's main characteristics, Fanghanel et al. (2016a) have recently defined SoTL more broadly as an essentially collaborative, research-led and reflective form of professional development and practice with the strategic potential to inform policy and capacity building at local and institutional levels, while addressing the diverse and complex landscape of the Higher Education sector operating within the UK and other countries around the world.

A review of literature

Across the course of its evolution, SoTL has been the subject of intense scrutiny. Since the early works of Boyer (1990), Shulman (1993), Hutchings and Shulman (1999) and Trigwell et al. (2000), and debate surrounding the research-teaching nexus (Brew 2006; Tight 2016), the field has been reviewed and analysed by numerous authors on a regular basis, each taking similar as well as different aspects upon which to focus their attention. The 11 articles cited here provide ample information alongside the other sources cited elsewhere with which to present an adequate overview of how the field has developed over time.

Described as a 'movement' still in its youth, Gilpin and Liston (2009) began by considering if SoTL might shift institutional priorities from research in the disciplines to research in pedagogy more generally, thereby transforming the profession rather than transforming teaching and learning more locally. In their minds at least, SoTL reconceptualised teaching and learning by promoting the 'commons', or spaces for the exchange of ideas and community building among relevant stakeholders and supporting, 'on multiple levels', everyday pedagogical practices and those engaged in teaching and learning itself. In this way, Gilpin and Liston saw the practice of SoTL shifting emphasis from previous curriculum reform 'movements' to the environments and multiple contexts in which teaching and learning actually took place. Taking this further, Potter and Kustra (2011), provided a useful distinction between 'scholarly teaching' and the 'scholarship of teaching and learning' (first considered by Shulman 1993 and Hutchings and Shulman 1999) and why this is important, as well as to illustrate SoTL as a unique form of enquiry:

[Scholarly teaching] 'Teaching grounded in critical reflection using systematically and strategically gathered evidence, related and explained by well-reasoned theory and philosophical understanding, with the goal of maximising learning through effective teaching.' (3)

[Scholarship of teaching and learning or SoTL] 'The systematic study of teaching and learning, using established or validated criteria of scholarship, to understand how teaching (beliefs, behaviours, attitudes, and values) can

maximise learning, and/or develop a more accurate understanding of learning, resulting in products that are publicly shared for critique and use by an appropriate community.’ (2)

Potter and Kustra went on to produce a series of models outlining some of the different ways in which scholarly teaching and the scholarship of teaching and learning might be (mis)understood and interact:

- **The mono model:** Scholarly teaching and SoTL are thought indistinguishable or inseparable even though the necessary conditions of one are not the same as the other - little improvement in learning
- **The mutual influence model:** Scholarly teaching and SoTL influence each other partially, but with an emphasis on scholarly teaching – improved learning but to a limited degree
- **The linear development model:** Scholarly teachers become SoTL practitioners or previously uninterested teachers become more SoTL involved – both routes lead to some improvement in learning
- **The magisterial model:** Scholarly teaching and SoTL characteristics overlap within different individuals who respond partially or fully and effectively in practice – most optimal improvement in learning

As Potter and Kustra concluded, how these models are conceptualised, adopted and promoted is important as ‘misleading models lead to false pedagogical and curricular assumptions [and] false assumptions lead to poor decisions’, with important implications for how teaching programmes are designed, how resources are allocated and how policies are developed.

Despite growing in popularity, certain elements of SoTL remained underdeveloped for some time. Published in the same year, Felton (2013) explored the need for shared principles of good practice in SoTL while Hubball et al. (2013) considered theoretical underpinnings and emerging trends to advance more institutional recognition. Felton argued that for SoTL to be fully recognised and accepted within Higher Education, consistency in the means by which studies were conducted and presented for evaluation was essential. Felton’s principles, recognising the student voice and students themselves as co-producers, included:

- Focusing enquiry into student learning alone
- Working in partnership with students themselves
- Grounding any work undertaken in context
- Adopting a methodologically sound approach
- Ensuring the public dissemination of findings

Noting that SoTL at that time was also more practical and ‘classroom oriented’ than theory or hypothesis driven, Felton was also of the view that without guiding principles, work presented as SoTL conveyed a sense of ‘amateurism’ and ‘mysticism’ resulting in ‘scepticism’ in certain quarters, all of which conspired to

hinder its progress. In a similar vein, Hubball et al. called for a more integrated view of SoTL if the field was to expand. Acknowledging that no single theory or strategy was adequate to cover every aspect of SoTL, and that combining theories and strategies was equally unsatisfactory, SoTL at that time remained inherently situated, socially mediated and locally implemented and in need of 'development enquiry', 'implementation enquiry' and 'evaluation enquiry' in order to improve effectiveness and efficiency. Without this, it was said that:

'The term "SoTL" is sometimes narrowly interpreted as only applying to research on classroom and/or course-based pedagogical practices, rendering incredibly substantive contributions such as educational leadership, program-level reform, curriculum renewal initiatives, and related scholarship largely invisible in the recognised activity of a research-intensive university. Equally, competing institutional priorities (e.g. disciplinary research foci and criteria for merit, tenure, and promotion) may deem inquiry into curriculum practice as being insufficiently scholarly or important.' (50)

Four years later, Divan et al. (2017) produced one of the first detailed summaries of SoTL methodology. Derived from an analysis of 223 empirical studies published between 2012 and 2014 in explicitly focused SoTL journals, qualitative (37.2%), quantitative (29.6%) and mixed-methods (33.2%) research designs were commonly employed in almost equal measure. While most studies were also undertaken from within the United States (88.3%), student data took centre stage but with a lack of multiple data collection instruments and triangulation. The authors concluded that SoTL research was characterised by a 'methodological pluralism' supporting Chick's (2014) 'big tent' view of the field which could be advanced with careful thought. In a more comprehensive overview charting SoTL developments from 1990 to 2017, Tight (2018a) also noted that SoTL had become an increasingly popular if somewhat 'dispersed' and inter-disciplinary theme for research and practice, recognising the diversity of methodologies, research designs and theoretical frameworks employed, and the importance of adopting a more critical approach to teaching, learning and policy making. Within Tight's review, it was noted that prior to Boyer's seminal work published in 1990, only 93 articles bore the 'scholarship of teaching' in their titles. By 2000, 291 articles were published in that year alone, with a further 2040 appearing in 2010 and a little under 4000 in 2015, encompassing all major disciplines from across the arts, humanities, social sciences and STEM subjects. Despite an accelerating interest in the field, with a great many articles still emanating from within the US alone, Chick et al. (2019) remained of the view that the diversity of SoTL practitioners was a strength but that this also made SoTL 'a complex field to understand and navigate, and perhaps even more complex to contribute to'.

Chick's position was later extended in detail in three recent contributions by Webb and Tierney (2020), Kim et al. (2021) and Bailey et al. (2021). For Webb and Tierney, studying SoTL practice in the UK and in the US, the reality was that educational leaders were situated within a complex cultural network of 'personal, professional, and financial tensions' often meaning that the Higher Education

Institutions (HEIs) in which they worked needed to be better at fostering institutional and departmental cultures that predisposed, enabled, reinforced and valued teaching-focused colleagues to actively engage in SoTL as a primary activity and not as an 'off the desk' process. Providing SoTL practitioners with the time, through differentiated workloads and strategic SoTL-based programmes, was considered key to supporting sustained high-quality work in the field. For Kim et al., competing priorities and a lack of background knowledge and research skills relevant to SoTL work was also thought problematic but easily overcome by having colleagues working alongside more experienced others as well as receiving support provided by institutional teaching and learning centres. Somewhat similarly, Bailey et al. considered the transition from discipline expert to SoTL practitioner often poorly supported and frequently undertaken in isolation with the establishment of a Faculty Learning Community (FLC) providing necessary space to share challenges and give practical support to engage in SoTL, thereby also providing a sense of belonging to re-connect with others and promote scholarship (see also Marquis et al. 2014 on building capacity through international collaboration and Vithal 2018 on 'institutionalising' SoTL when conceptualised more inclusively and multidimensionally).

Disciplinary perspectives, resources and the practicalities of 'getting SoTL done'

'A consensus has formed within growing circles in academia that there is scholarly research to be done on teaching and learning, that the systematic creation of rigorous knowledge about teaching and learning is a crucial prerequisite to responding to major challenges facing academia, that this knowledge must be shared publicly and should build cumulatively over time, and that the explorations of this area should be conducted by academics from all disciplines ...' (Pace 2004: 1174)

Since Boyer's seminal work published in 1990, the diversity of SoTL practitioners involved and the resultant growth in published articles in the field improved the reach of SoTL beyond expectation. For Healey (2000), at the time of publication (see Webb and Tierney 2020 for a more institutionally-focused approach), SoTL needed to be developed within the context of the culture of the discipline in which it was applied and thereby employ discipline-specific principles of good practice including discipline-based pedagogic research:

'Developing the scholarship of teaching is more than striving to be an excellent teacher or being scholarly. Whereas striving for excellence involves a high level of proficiency in stimulating students and fostering their learning in a variety of appropriate ways, a scholarly approach to teaching entails being familiar with the latest ideas in one's subject and also being informed by current ideas for teaching the subject. A scholarly approach also involves evaluating and reflecting on one's teaching practice and the student learning which follows.' (172)

Witman et al. (2007), writing on the status of SoTL across disciplines, later reported high uptake in the natural sciences with relatively little activity in other areas. Ten years on, SoTL was regarded by Tight (2018a) as 'genuinely cross-disciplinary'. A selection of indicative examples from within the research literature are highlighted as follows:

- Science, engineering and mathematics (Bennett and Dewar 2012; Rowland and Myatt 2014; Dewar et al. 2018; Wolff et al. 2021)
- Geography and History (Healey 2003; Booth 2004; Pace 2004; Clark 2010)
- Sociology and Psychology (Paino et al. 2012; Hake 2015; McKinney 2018; Gurung et al. 2019)
- Political science (Craig 2014; Trepanier 2017)
- Business studies (Lucas 2011; Neck and Corbett 2018)
- Nursing and Social work (Wehbi 2009; Oermann 2014; Grise-Owens et al. 2016)

Success in the field not only resulted in a rise in output over time, but the emergence of journals specifically devoted to promoting and disseminating SoTL itself (see also Tight 2012, 2018b and Healey et al. 2020). These include:

- Active Learning in Higher Education
- British Journal of Educational Studies
- College Teaching
- Higher Education Pedagogies
- Higher Education Quarterly
- Higher Education Research and Development
- Innovations in Education and Teaching International
- Innovative Higher Education
- International Journal for Academic Development
- International Journal for the Scholarship of Teaching and Learning
- International Journal for the Scholarship of Technology Enhanced Learning
- International Journal of Teaching and Learning in Higher Education
- Journal of Effective Teaching in Higher Education
- Journal on Excellence in College Teaching
- Journal of Further and Higher Education
- Journal of Learning Development in Higher Education
- Journal of Online Teaching and Learning
- Journal of Pedagogical Research
- Journal of Perspectives in Applied Academic Practice
- Journal of Problem-Based Learning in Higher Education
- Journal of the Scholarship of Teaching and Learning
- New Directions for Teaching and Learning
- Pedagogical research

- Scholarship of Teaching and Learning: Innovative Pedagogy
- Studies in Higher Education
- Teaching & Learning Inquiry
- Teaching in Higher Education
- Technology, Pedagogy and Education
- The Practice and Evidence for the Scholarship of Teaching and Learning in Higher Education
- Transformative Dialogues: Teaching and Learning Journal

Articles promoting SoTL can also be found within the pages of discipline-specific journals devoted to the study of education and subject-related pedagogy too (e.g. the *International Journal of Science Education*). Valuable reads particularly for colleagues new to Higher Education, or those who want to read more about the profession as a whole and which draw on the principles of SoTL, include the seminal texts of Ramsden (2003), Entwistle (2009), Biggs and Tang (2011) and Fry et al. (2014). Other texts solely inspired by and devoted to SoTL include the works of McKinney (2013) and Chick (2018). Murray (2009) and Haigh (2010) provide particularly valuable introductions to the field from within the UK and New Zealand.

Further information, support and guidance on SoTL can also be found within a number of UK and other university websites. Examples include:

- The University of Edinburgh: Scholarship of Teaching and Learning.
<https://www.ed.ac.uk/institute-academic-development/learning-teaching/staff/sotl>
- The University of Leeds: SoTL at Leeds.
<https://studenteddev.leeds.ac.uk/developing-practice/sotl-at-leeds/>
- The University of York: Scholarship of Teaching and Learning Network.
<https://www.york.ac.uk/staff/teaching/develop/sotl-network/>
- University College London (UCL): Researching your teaching practice – an introduction to pedagogic research.
https://www.ucl.ac.uk/teaching-learning/sites/teaching-learning/files/a_short_introduction_to_pedagogic_research.pdf
- Vanderbilt University: Scholarship of Teaching and Learning (SoTL)
<https://my.vanderbilt.edu/sotl/>
- University of Central Florida: SoTL Getting Started
<https://fctl.ucf.edu/about-us/services/getting-started/>

The International Society for the Scholarship of Teaching and Learning (<https://issotl.com/about-issotl/>) provides valuable information and other resources to help maintain currency in the field, including an annual conference for the purposes of dissemination and networking.

On the practicalities of 'getting SoTL done', the following steps, which might be familiar to anyone who has done any educational or pedagogical research before,

are drawn from the variety of resources highlighted. Remember, however, SoTL, like any other form of 'researcherly' activity, is all about context and focus and not as 'linear' as presented:

- **Identify 'the problem':** Develop clear and achievable goals, research questions or ideas for your SoTL project and the area of practice, student activity, use of resources or module design and delivery you're curious about, interested in or want to investigate (e.g. drawing on your own lived experiences of working with and teaching and assessing students, what do you want to know more about, understand more fully, change or improve – in other words, what works, what doesn't work and why?)
- **State the purpose** What do you hope to achieve or change by doing this work? What are your intended outcomes?
- **Don't forget ethics:** Because SoTL involves working with human participants, in whatever capacity, ethical considerations take centre stage
- **Do the groundwork:** Draw on previous knowledge by sharing experiences, asking around and conducting a thorough review of literature relevant to what you've chosen to investigate, while looking to identify gaps or areas to build upon – then refine and ground your initial goals and research questions accordingly
- **Develop an appropriate research design and methodology:** Select a research design and choose the methods of data collection that will allow you to best achieve your goals or answer your questions (remembering that SoTL is a pragmatic and eclectic practice – anything goes: descriptive, case study, mixed-methods, correlational and experimental designs involving qualitative and/or quantitative data collected by any number of different means all offer valid approaches in the study of teaching and learning)
- **Analyse and interpret your data:** Use well-established data analysis techniques to produce valid, reliable and meaningful results or to evaluate the evidence-base and impact of your work in order to determine the effectiveness of what it changed
- **Reflect:** Embrace critical and self-critical reflection in order to help build iterative improvement cycles into your teaching practice (in other words, implement your own recommendations and continue to monitor and evaluate further) – Has your intervention been successful?
- **Apply and inform:** How does your work inform practice or policy or lead to capacity building or transformational change at local or institutional level?
- **Go public:** Disseminate and share your SoTL work with others by any and every means and offer your work up for peer review via publication
- **Seek out help:** If SoTL is new to you then seek out help – acquire relevant expertise by way of training or mentoring to get you started

Challenge, critique and insight

'In scholarship and research, having a "problem" is at the heart of the investigative process; it is the compound of the generative questions around which all creative and productive activity revolves. But in one's teaching, a "problem" is something you don't want to have, and if you have one, you probably want to fix it. Asking a colleague about a problem in his or her research is an invitation; asking about a problem in one's teaching would probably seem like an accusation.' (Bass 1990: 1)

As indicated throughout, SoTL has often received fair criticism for lacking any agreed definition (Kreber 2002, 2007), for lacking academic rigour in its application and how it is reported (Bowden 2007), and for failing to challenge an over-emphasis in many institutions on the pursuit of research excellence at the expense of all other performance criteria (Henderson and Buchanan 2007). Even more critically perhaps, Boshier (2009) wrote of SoTL:

'Each impediment makes SoTL a hard sell ... they constitute a formidable problem for those wanting to counter the marginalisation of SoTL ... First, there is a persistent tendency to use scholarship of teaching as a synonym for other activities. Second, Boyer's definition was conceptually confused. Third, it is difficult to operationalise. Some advocates aggregate SoTL elements and portray them as overlapping and interacting. Others disaggregate them and try to operationalise (and derive indicators) for each one separately. Fourth, much discourse concerning SoTL is anti-intellectual and located in a narrow neoliberalism. Fifth, there is an uncritical and almost quaint reliance on peer review as the mechanism to detect scholarship.' (12-13)

Interestingly, SoTL has also been criticised for tending to prioritise or focus solely on teaching over learning, despite wanting to optimise the latter (Boshier and Huang 2008; Manarin et al. 2021). In an early, incomplete but still prophetic and relevant US contribution from Barr and Tagg (1995), some of the many differences between teaching and learning are clearly identified (Table 1). Shifting focus away from teaching to learning, SoTL might usefully be defined as the systematic study of student learning (or engagement more broadly) using appropriate methodology, informed by prior research, and disseminating the results. Unlike teaching, which tends to draw more on models and frameworks, focusing on learning also allows the SoTL practitioner to draw on and explore learning theory.

Taking a somewhat different form of critique, Cappello and Miller-Young (2020) described the journals and what kinds of citations were used in SoTL publications, providing some empirical evidence that SoTL literature reviews could benefit from more depth. Somewhat similarly, but reviewed from an 'academic literacies' perspective, Healey and Healey (2023a,b) concluded that SoTL writers should be less 'insular' in their approach to reviewing literature and take more 'purposeful steps' to 'search for, cite, and amplify diverse voices'.

The teaching/instruction paradigm	The learning paradigm
Mission and purpose	
<ul style="list-style-type: none"> ➤ Teach/provide or deliver instruction ➤ Transfer knowledge from staff to students ➤ Offer courses and programmes ➤ Improve the quality of teaching ➤ Achieve access for diverse students 	<ul style="list-style-type: none"> ➤ Produce learning ➤ Elicit student discovery/construction of knowledge ➤ Create powerful learning environments ➤ Improve the quality of learning ➤ Achieve success for diverse students
Criteria for success	
<ul style="list-style-type: none"> ➤ Inputs/resources ➤ Quality of entering students ➤ Curriculum development/expansion ➤ Quantity and quality of resources ➤ Enrolment, growth in numbers and revenue ➤ Quality of staff and teaching/instruction 	<ul style="list-style-type: none"> ➤ Learning and student success-outcomes ➤ Quality of existing students ➤ Development of learning technologies ➤ Quantity and quality of outcomes ➤ Efficiency and growth in learning ➤ Quality of students and learning
Teaching/learning structure	
<ul style="list-style-type: none"> ➤ Atomistic ➤ Time held constant, learning varies ➤ 50-minute lecture ➤ Classes start and end at the same time ➤ One lecturer one room ➤ Independent disciplines and departments ➤ Getting the material covered ➤ End of course assessment ➤ Grading of classes ➤ Private assessment ➤ Degree equals accumulated credit hours 	<ul style="list-style-type: none"> ➤ Holistic ➤ Learning held constant, time varies ➤ Learning environments ➤ Environment ready when student is ➤ Whatever learning experience works ➤ Cross-discipline/departmental collaboration ➤ Specified learning results ➤ Pre/during/post assessment ➤ External evaluation of learning ➤ Public assessment ➤ Degree equals demonstrated knowledge and skills
Learning theory	
<ul style="list-style-type: none"> ➤ Knowledge 'exists' independently of the learner ➤ Knowledge comes in chunks and bits ➤ Learning is cumulative and linear ➤ Fits the knowledge storehouse metaphor ➤ Knowledge is lecturer-centred/controlled ➤ 'Live' lecturer 'live' students required ➤ Learning is individualistic and competitive ➤ Talent and ability are rare 	<ul style="list-style-type: none"> ➤ Knowledge is shaped by experience ➤ Knowledge is constructed and created ➤ Learning is a nesting/interaction of frameworks ➤ Fits learning to ride a bike metaphor ➤ Learning is student-centred and controlled ➤ Active learning required, not 'live' lecturer ➤ Learning is co-operative/collaborative/supportive ➤ Talent and ability waiting to be nurtured
Productivity/funding	
<ul style="list-style-type: none"> ➤ Cost per hour of teaching/instruction per student ➤ Funding for hours of teaching/instruction 	<ul style="list-style-type: none"> ➤ Cost per unit learning per students ➤ Funding for learning outcomes
Nature of roles	
<ul style="list-style-type: none"> ➤ Staff primarily lecturers ➤ Staff/students work independently and in isolation ➤ Lecturers classify and sort students ➤ Staff serve the process of teaching/instruction ➤ Any expert can teach ➤ Line management, independent actors 	<ul style="list-style-type: none"> ➤ Staff primarily designers and facilitators ➤ Staff/students work together and in teams ➤ Lecturers develop competencies and talents ➤ Staff are educators who produce learning/success ➤ Empowering learning is challenging and complex ➤ Shared governance/teamwork

Table 1: Teaching vs learning (from Barr and Tagg 1995: 17)

At its most extreme, Canning and Masika (2020) have even suggested ‘that despite its honourable intentions, the SoTL “movement” has been a thorn in the flesh of serious scholarship into teaching and learning in Higher Education’ and ‘that the time has come to consign SoTL to history’. Considering the replacement of SoTL with pedagogical research, which they see as more ‘all encompassing’, rigorous and productive, Canning and Masika concluded that:

‘The problem with the ever-widening scope of SoTL has been that research into learning and teaching is devalued by association ... those who have attempted to promote the idea of SoTL as an inclusive means to enhance the status of learning and teaching in Higher Education have actually contributed to the devaluation of research into learning and teaching. In a UK context, policies to enhance the status of learning and teaching have actually separated it from research entirely creating a separate category of less importance: “Pedagogic” research [with] separate career paths for “teaching specialists”.’ (1093)

The replacement of SoTL with pedagogical research, in name at least, is a growing trend indeed. For the purposes of this article, however, the use of SoTL, which remains the most widely understood term, which comes with the larger literature-base for the moment, and which also serves as perhaps a more appropriate introduction for readers new to this type of activity and form of enquiry, is retained. But pedagogical research really is more than just a change in name. For those more ahead in their knowledge of educational or disciplinary research with respect to SoTL, a detailed introduction to pedagogical research, including its status for submission within REF, is provided by Kneale et al. (2016), Cotton et al. (2018), Curtin and Hall (2018), Tierney (2020) and Evans et al. (2021). The journals Pedagogical Research and the Journal of Pedagogical Research are also worth browsing in addition to the SoTL journals provided earlier.

Conclusions, considerations and recommendations

So, where are we with SoTL now? As indicated throughout this review, SoTL is a valuable but not uncontested field, though none of the reservations, challenges, critiques and scepticism alluded to or explicitly stated here are in any way insurmountable at all. SoTL endures by shrugging off its perceived shortcomings by subscribing to pragmatic realism and inclusivity, thereby remaining an entirely credible, authentic and ‘worthy’ pursuit, one which adopts an eclectic approach to establishing ‘what works’ while accommodating disciplinary context and variation, and one which acknowledges the complexities surrounding instructional practice while attempting to understand change and how students behave and adapt.

As reminded by Hutchings et al. (2011), however:

'The scholarship of teaching and learning encompasses a broad set of practices that engage [lecturers and others] in looking closely and critically at student learning in order to improve their own courses and programmes, and to share insights with other educators who can build on their efforts ... Yet, if Higher Education is to meet growing imperatives around student attainment, in regard to both quantity and quality of learning, the scholarship of teaching and learning must be better integrated into the fabric of campus life. This cannot be achieved by individuals or small groups acting alone.' (1)

In the UK, AdvanceHE remains a valuable source of support materials in connection with SoTL. As part of a recent project carried out on behalf of the then Higher Education Academy (HEA), with a view to investigating the extent to which activities undertaken under the banner of SoTL might inform sector-wide reflections on the ways of identifying, recognising and rewarding excellence in teaching, Fanghanel et al. (2016a,b,c) began from their own extensive review of literature by noting that while disciplines themselves played a crucial role in building capacity in SoTL, SoTL often struggled to gain legitimacy in disciplinary environments because of sometimes 'entrenched politics and cultures' and that disciplinary communities were themselves frequently regarded as the 'guardians of conventions' and what counts as scholarship and scholarly knowledge (the '*tribes and territories*' of Becher and Trowler 2001). However, an analysis of thematic trends enabled Fanghanel et al. to identify consistent and recurring patterns from within the field with which they established a heuristic framework for examining SoTL and therefore how to move forward. As suggested here, if aligned with the equally heuristic framework of how students learn at university presented by Entwistle (2009), SoTL practitioners have a powerful tool with which to work. The three embedded levels of operation presented by Fanghanel et al. are sufficiently important to elaborate upon in detail as both recommendations and questions for consideration:

- **The micro:** Institutions and departments should support and develop academics engaged with their students as co-designers and co-producers investigating their own individual practices within disciplines, networks and communities of like-minded practitioners – How do we teach in an engaging, productive and scholarly manner? What do we mean by and how do we recognise optimised learning? What types of approaches, methodologies and data do we need to collect to validate and legitimise our claims? How do we achieve wider academic recognition for what we achieve?
- **The meso:** Engaging students as consultants and influencers, institutions and departments should consider their direction of travel and the impact of policy on career aspiration and capacity building (including HEA/AdvanceHE membership itself) – What criteria and structures do we need to recognise and reward good SoTL practice? What do we count as excellence in an SoTL context? How can we use SoTL to support and contribute towards career progression? Do we have the institutional structures in place for SoTL-based capacity building?

- **The macro:** Institutions and departments, including representation from students as co-researchers and disseminators, should commit to and engage fully with national and international frameworks and the wider academic communities and networks that impact and interact - Do we support SoTL activity through events and networks, and feed into debates about TEF and inclusion within REF?

The framework proposed was also used as the basis to develop an institutional and disciplinary audit and capacity-building tool (Fanghanel et al. 2016d). Interestingly, and among the most likely post-pandemic areas which might benefit from the attention of SoTL practitioners (and pedagogical researchers) at the time of writing this article, we might expect to find the use of educational technologies, hybrid and digital pedagogies and online learning across undergraduate and postgraduate courses alike taking centre-stage, particularly with the use of educational technologies now also featuring prominently in AdvanceHE's revised PSF Standards (AdvanceHE 2023). Devoting some attention to the rise of micro-credentials and other short courses as universities look to diversify their provision and client-base might also prove productive.

To conclude on the importance of SoTL:

- SoTL breaks down barriers between research and teaching and helps satisfy personal and institutional expectations of undertaking enquiry for those colleagues not motivated in pursuing traditional disciplinary routes
- It provides an opportunity for lecturers to critically and reflectively consider current provision and frame what they already do as an investigation/enquiry
- It helps build productive relationships and connections with students as collaborators, co-producers and contributors (voice and ownership)
- It helps with recognition, reward and career progression (academic promotion and membership of AdvanceHE/HEA)
- It allows lecturers to present educational reforms and innovations to others for critical commentary and peer review
- SoTL is a transformational change and capacity building agent for institutions, departments and individuals alike, as well as the Higher Education sector as a whole (think REF and TEF)

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