Defining and supporting the Scholarship of Teaching and Learning (SoTL): a sector-wide study

Literature Review

Contents

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Acknowledgments

1. Introduction

This literature review focuses on the objectives of the research project which were to:

- Update on recent developments in the international literature on SoTL to inform the project
- Chart the way SoTL is defined, supported, and embedded in institutional policy in the UK
- Provide resources to support institutions in relation to their rewards and promotions processes
- Identify strategies to engage students in SoTL
- Inform the next iteration of the Higher Education Academy UK Professional Standard Framework

The review examines the way SoTL is defined in the literature; SoTL in the disciplines; SoTL as educational development; SoTL in institutions; national frameworks for promoting SoTL; and student engagement with SoTL. The methodology for the review is outlined in paragraph 1.2. The conceptual framework for examining SoTL is discussed in paragraph 2.2. The paper concludes with a set of findings and recommendations emerging from this literature review. **These must be read with reference to the Executive Summary which provides an overview of the whole project, and a set of recommendations based on all components of the project.**

1.1 SoTL in the changing context of higher education

This project is part of the Higher Education Academy (HEA) programme on **staff transitions.** It focuses on the changing nature of the academic profession in a context where approaches to teaching and learning in higher education (HE) have been significantly affected by mass access and expansion; the impact of technology; and the imperative to ensure graduates acquire a complex set of skills and attributes commensurate with the challenges of global work contexts, during their years of study. In England, this transition has been made more problematic by the introduction in 2012 of a tuition fees regime that has shifted the financial burden from the funding councils onto private entities (students, families, employers) (BIS, 2011). From an economic perspective, institutions are dealing with increasingly **fluid funding models** (changing and unpredictable); a **declining unit of resource**; and

increased competition in a marketised environment (John and Fanghanel, 2015). In this context, they need to devise imaginative solutions to support and attract students, and to develop and retain a highly effective workforce. At the heart of the transformation of the academic environment, and of the academic profession, reside questions regarding the **status of research and teaching** in the academy, and the issue of the enduring **primacy of research** as a more valued academic function (Cashmore *et al.*, 2013; Chalmers, 2011); and more broadly tensions related to contradictory perceptions regarding the **characteristics** of higher education and attributes of the graduate; the **rhetoric about student choice** (Brown, R. with Carasso, H., 2013); and questions related to the **types of knowledge** that should be privileged at university.

The seminal work of Ernst Boyer in the US, redefining academic scholarship (Boyer, 1990), and subsequent work by the Boyer Commission (Boyer Commission, 1998) marked the start of an **on-going reflection on the academic role**. The first significant international project on this topic, the *International Survey of the Academic Profession* (Boyer *et al.*, 1994) acknowledged the necessity to adapt to new working conditions in a mass higher education system, the need for demographic renewal within the academy, and the related inevitability to harness new pedagogies. In its more recent iteration (Locke and Bennion, 2010), this work has identified the complexity and fragmentation of academic roles in relation of both teaching and research activities; and pointed to the way those **two functions** have been almost **completely separated** in terms of the way they are funded, assessed, rewarded and managed (Locke, 2012), with evidence that research has a much higher status than teaching, especially in the reputation of institutions and the career success of academics.

Further recent work on academic roles has shown how the tensions between and within these two academic functions are compounded by the context in which universities operate today, in particular the impact of increasingly **short-term and fast diminishing funding** support; the consequences of **ranking cultures** on academics and students; the energies deployed for successful **research audit** outcomes (as in the Research Excellence Framework); and the **fragmentation** resulting from increasingly diverse academic appointments (Locke, 2014). Ways of 'institutionalising' SoTL – i.e. using SoTL as a strategic framework for academic development and to redress the separation of teaching and research- have been examined (Fanghanel, 2013; Huber, 2004; Hutchings *et al*, 2011) and are specifically

explored in this review. At this juncture, in the changing context for higher education, SoTL can serve as a vehicle to bring teaching and research together, and combat the view that teaching should have a lower status.

Parallel to this work on the academy, academic careers, and their relation to organizational leadership and change, an important body of work has emerged on how to promote scholarship on teaching as a **vehicle to generate investigations on teaching and improve student outcomes**. The work of Lee Shulman who succeeded Boyer at Carnegie, and his colleagues at the Foundation provided a sense of direction (Hutchings and Shulman, 1999; Shulman, 1999b). The debate then moved to what have become two important characteristics of SoTL work - the necessity to disseminate and be **subject to peer critique** (Hutchings and Shulman, 1999); and the need to anchor one's work in theory and research (Hutchings and Huber, 2008; Kreber and Cranton, 2000). This second 'wave' also provided tools to frame analysis and evaluation of teaching practices - in particular the Course Portfolio (Hutchings, 1999); and a series of criteria for assessing SoTL (Glassick *et al.*, 1997; Kreber and Cranton, 2000; Trigwell and Shale, 2004). Soon this work turned to ways of developing communities and communal resources (Huber and Hutchings, 2005); and to ways of building scholarship within different disciplinary fields (Huber and Morreale, 2002; Hutchings, 2000; McKinney, 2013; Parker, 2002; Shulman, 2005).

In this context, this project is an opportunity to continue to develop the sector's understanding of the Scholarship of Teaching and Learning (SoTL) as a vehicle for linking teaching and research, and as an effective tool to support teaching and career development. The project will enable the HEA to provide focused support to individuals and institutions whilst contributing its own understanding of academic roles in today's universities. It may generate a reflection on how SoTL could be used as a qualitative measure to reward excellence in teaching in a way that is sensitive to the context of practice.

1.2 Methodology for the literature review on SoTL

The brief for this project was to summarise recent developments in the literature on SoTL in order to inform the HEA study. The search method was therefore desk-based (EBSCO online database; Google Scholar; organisational websites), and focused on the areas of SoTL deemed relevant to the project brief. It also used latest

publications in specialist journals (e.g. *International Journal of Academic Development; International Journal for the Scholarship of Teaching and Learning; Learning and Teaching Inquiry; Higher Education; Higher Education Research and Development*); recent national and international reports; and the team's national and international networks. Grey literature was used for the discipline section to identify the most recent trends.

We focus in this review on recording the latest developments, as they relate to the objectives of the project. To recap, those objectives are to chart the way SoTL is defined, supported, and embedded at institutional level; inform the work of HEPs on rewards and promotions processes; ways of engaging students in research and SoTL; and inform the next iteration of the Higher Education Academy UK Professional Standard Framework.

2. Defining SoTL

2.1 The concept of SoTL in higher education

In this section we explore the concept of SoTL through the literature and derive from this a conceptual framework.

The US-born concept of SoTL has been used in the academic discourse for well over three decades – with reference to Boyer's seminal framework (1990) remains however a relatively ill-defined concept, to capture activities related to enhancement of, and reflection on, practice in higher education. The current HEA UKPSF (UK Professional Standards Framework) is underpinned by a SoTL philosophy– reflective practice; dissemination of practice-based research; engagement of students; attention to discipline-specificity; and scholarship is recognised in the UKPSF as an area of activity [A5] and as a professional value [V3] - an output and a disposition.

Renewed attention over the past three decades or so to the quality of teaching in higher education – exacerbated by the parallel phenomena described in section 1.1 relating to expansion and marketization of HE - has provided a point of entry for SoTL under different guises, in a number of institutions across the world (Healey, 2012; Healey *et al.*, 2014a; Healey *et al.*, 2014b; Marquis *et al.*, 2014). SoTL covers concepts as diverse as reflection and inquiry on learning and teaching practices, strategies to enhance teaching and learning, curriculum development, the promotion

of research-informed teaching, undergraduate research, and student engagement in disciplinary or SoTL research. SoTL is also fundamentally linked to, and informs, visions of, and practices for, strategic professional development, career planning, promotion and recognition (Chalmers, 2011; Fanghanel, 2013; Hutchings *et al.*, 2011; Mårtensson *et al*, 2011). In this context, it has emerged as a strong paradigm to drive examination and change of practices; mainly because SoTL promotes a research approach to practice - often related to solving a 'burning question' (Wright *et al.*, 2011) - rather than a passive examination of generic teaching and learning issues.

The potential of SoTL, however, needs to be better exploited in the context of academic work environments and career pathways; and specifically in relation to patterns of work– considering for example the exponential growth of teaching-focused (including teaching-only) appointments and the increase in teaching-only institutions given the growth of private universities and colleges. An exploration of the commitment to, forms of, and recognition for, SoTL in Higher Education Providers (HEPs) requires some consensus on what SoTL is for use across the sector. Without this, progress in relation to careers, esteem and value will remain slow, patchy and SoTL will lack legitimacy within the sector, whilst it holds strong potential to inform the assessment of teaching excellence at the level of individuals, departments and institutions (Potter and Kustra, 2011).

2.2   A framework for SoTL

There is a degree of perplexity as to what SoTL actually means, both in the minds of academics; and in the field of research (the literature bearing on definitions of SoTL is witness to this confusion). This state of affairs, to an extent, mirrors the complexity of teaching and learning; the variety of contexts in which it takes place; and the scepticism amongst many that teaching and learning is an area worthy of inquiry. The concept envisaged by Boyer (Boyer, 1990) has made in-roads - and evolved as a concept - in the US, and in English-speaking countries; it is also beginning to emerge as an intellectual alternative model to 'training' in Europe mainland (Rege Colet and Berhiaume, 2014; Roxå and Mårtensson, 2008), sometimes under the label of 'scholarship of pedagogy' (Henard and Roseveare, 2012). In this section we propose a framework based on our reading of the literature on SoTL to help conceptualise its varied acceptations based on 1) the characteristics of SOTL and 2) a focus on three different levels of the HE system. In relation to defining and

recognising SoTL, the characteristics identified in the literature were further refined and tested in the empirical part of the study to provide a framework to define and recognise SoTL in practice http://www.sotl.eu/documents/executive_summary.html which captures the context of practice within four main characteristics and three levels of the system.

2.2.1   Characteristics

The two foundational characteristics identified in section 1.1 (focus on learning outcomes; focus on public nature of the inquiry) have led to a proliferation of definitions and viewpoints which are associated with **teaching quality and quality enhancement**; **teaching excellence or and 'scholarly' teaching** (Hutchings and Shulman, 1999; Kreber and Cranton, 2000); and **pedagogic research**. Increasingly the role of students in SoTL is emphasised.

Where SoTL characteristics are associated with research, a series of definitional themes emerge:
- SoTL is conflated with **research-led teaching**
- SoTL is about **teaching in research mode** and engaging students in **research mode learning**, with related implications on curriculum reform; and as **actors in the SoTL inquiry**
- SoTL is about **dissemination** of analyses of practice to inform others; and developing intellectual **communities** and resource **commons** – this has led to a significant emphasis on **disciplinary** and **interdisciplinary** considerations

By extension – and linked to the value attached to research activities in higher education in relation to career advancement – SoTL has been utilised as:
- A means of **demonstrating excellence** with a view to raising the status of teaching in relation to that of research
- A framework to **evidence excellence** in teaching and learning and **assess** teaching quality
- A tool to **develop academics** and teaching **practice**

These characteristics of SoTL represent different facets of a complex object, and the literature has focused on the following aspects which will inform the approach in this

review – leaving aside Point 1 on individual practice (how to do SoTL) as this aspect is not in the remit of the project:

1. A focus on **individual SoTL practice** and the methods and processes to carry out inquiry into teaching:
   o How to teach in a scholarly manner that engages students? (all literature on research-led; research-informed teaching)
   o What type of data to collect for SoTL investigations?
   o How to seek validation and peer-comments: publications, dissemination, research on teaching and learning?

2. A focus on the **discipline** being seen a crucial locus of practice to for the adoption and adaptation of SoTL; enacted in in academic departments, and through national networks; at the same time a sense that SoTL has interdisciplinary potential

3. The role of **institutional structures for recognition** of SoTL work, in the context of seeking equal status for teaching and research in higher education:
   o What structures are needed to promote and reward teaching?
   o What criteria can be recognised by the sector as indicators of this SoTL quality?
   o What evidence can legitimately count as evidence, and how can it be documented?
   o What counts as excellence?
   o How to relate to career progression and promotions?

4. The related role of **institutional structures for capacity-building** to develop the academic workforce mainstream, and the academic offer through SoTL and thus ensure 1) that institutional quality of teaching is secured and 2) that curricula have the potential to prepare students to deal with complex professional and citizenry/ethics issues.

5. The role of **national and international context** (policy, practice, communities). Under this theme, we note the emphasis on community of academics involved in SoTL; an international community of practice; a political agenda to share practice under 'commons' agreements; a desire to engage students in this agenda as partners; a review of teaching as an

intellectually challenging function well capable of rivalling research in terms of its intellectual make-up; a philosophy of dialogue and engagement (and even of advocacy). There is little literature on the role of national policies, apart from recurrent reference to the imbalance in the status of teaching vs. research.

2.2.2 Different levels of practice

The second dimension relates to the different levels at which SoTL operates in the HE system:

MICRO
Individuals
engaged in SoTL

MESO
Institutions

MACRO National
and international
context
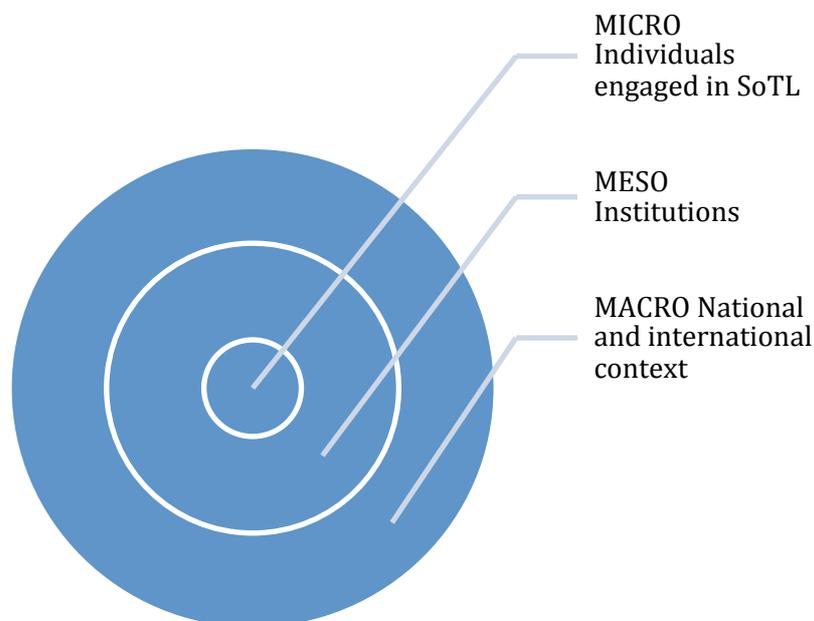
FIGURE 1: A framework showing the levels where SoTL operates in the HE system

This framework shows, at the centre of the circle, the *micro* level of the HE system where **academics** in practice are engaged with their students in their locus of practice, deploying enquiries on their practice; and the **department** where the disciplinary community of academics operates. At the *meso* level, we find the **institution** and the impact of its strategic direction; its policies on staff development and promotion. The outer section shows the *macro* level of the higher education

system, and the **national and international frameworks** (regulations, incentives, and various steering policies) and **national and international communities** that impact and interact.

Clearly this is a heuristic device, to help us define SoTL, and there is traffic between those three circles – i.e. something happening at the *macro* level has consequences (intended and non-intended) at all other levels of the systems. The middle circle is the locus that addresses questions related to institutional strategies and enhancement and recognition (*meso* level). It relates to activities in the inner circle concerned with individuals doing SoTL in departments – the locus where the discipline is being enacted (*micro* level); both are impacted by the outer circle which helps contextualise SoTL in the broader policy context, and with reference to a wider international community (*macro* level).

2.3 The nature of SoTL

A significant debate over the years has been the relation of SoTL inquiry to theory and research on teaching and learning. Bearing in mind that SoTL brings together all the disciplines of higher education, it is challenging to account for its epistemological stance, and to agree on the criteria that might bring consensus about the validity of any inquiry it generates. Since Boyer, this is a task that the SoTL community has been engaged in. This tension between what can be termed **SoTL** as **pedagogical research** vs. SoTL as **action research** is well rendered by Kanuka's comment below that SoTL publication does not amount to evidence that the work is scholarly work (Kanuka, 2011):

> Notwithstanding such small-scale efforts [i.e. inquiry on practice] may make contributions to one's practices—but when they are made public, is this enough to be considered a scholarly contribution?
>
> (Kanuka, 2011: 2)

Kanuka illustrates in her brief comment, the challenge for SoTL, not simply of defining itself but also of finding legitimacy in the academy. As a specialist in 'education', Kanuka questions the validity of any inquiry that would seek to make a contribution to 'a field of study that has existed for more than a century' [i.e. the field of education](Kanuka, 2011: 9), and to which a 'SoTLer' does not belong. Her

contention is that the academic engaged in SoTL is not a specialist in the field of education, and cannot therefore make a scholarly contribution to its field. So, intricately associated with the question of the validity of the **epistemic** framework for SoTL, there are questions related to **legitimacy** in a field and **power relations** within the academy, that are exacerbated by the tensions identified earlier concerning the status of teaching in relation to research, in higher education. This explains the relatively slow progress made in SoTL across boundaries and academic conventions. More broadly, these questions about the nature of the scholarship in teaching and learning have implications for how the quality of this form of inquiry is assessed, and what institutions might recognise as valid outputs that can count as evidence in promotions and rewards. The issue of output validity is compounded by the confusion brought about by the Research Excellence Framework of 'scholarship' – which is defined as 'the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases' (HEFCE, 2012) – so peripheral rather than original contributions to the field of knowledge.

2.4 Areas of emphasis for SoTL

In relation to assessing scholarship, the field has moved from relatively abstract criteria focusing on the **process of inquiry** (goals, preparation, methods, results, presentation, reflexivity) (Glassick *et al*, 1997) to a focus on **students' learning** and **learning processes** (Kreber and Cranton, 2000), and the need to **'go public'** (Kreber, 2002). Recent work suggested that SoTL needs to qualify the meaning of 'going public', and focus instead on the need to show **impact** (Trigwell, 2013; Gunn and Fisk, 2013); working in **partnership with students** (rather than simply for their benefit) (Healey *et al.*, 2014a; Little, 2011); and **contextualizing** SoTL inquiry (Felten, 2013; Cousin, 2008; Fanghanel, 2007). Discussions have also started on the nature of **SoTL-oriented pedagogies** (taking a broad view of the curriculum) and the need to address global awareness (Fanghanel and Cousin, 2012; Kreber, 2012, 2013) and 'learning-related attitudes, values, and beliefs' (Coppola and Krajcik, 2013):

> As science educators, we would include discipline-centered "ways of thinking, feeling, and behaving" (i.e., scientific disposition) among these learning-related attitudes, values, and beliefs: those things that accompany learning the more specific subject matter topics and concepts. Developing evidence-based scepticism, for example, probably never appears on the syllabus of a science

class, but one nonetheless hopes that improving students' sense of scepticism is an actual learning outcome.

<div align="right">(Coppola and Krajcik, 2013: 630)</div>

These developments are important and show that the concept of SoTL has evolved from its humble beginnings as a focus on learning processes and classroom practice, to embrace the whole spectrum of academic practice (i.e. teaching and learning in its widest acceptation) and the meaning of the academic endeavour. Increasingly the implications for institutionalisation, capacity-building, and the development of new curricula to address global issues, have been examined as legitimate terrain for SoTL.

2.5 SoTL expanding territories

The shift in the definition of SoTL from classroom practice to strategic vehicle for institutions as they address the quality and status of teaching in higher education, and the preoccupations with broader aspects of academic practice, denotes **a focus on supporting and institutionalising SoTL** to impact on quality and nature of learning, and on career advancement (performance and excellence). In parallel to this, new insights are emerging as a result of worldwide transformations resulting from a broadening of the higher education sector (to include college-based higher education for example), underpinned by **richer and more diverse understandings of the types of knowledge** relevant to working and living in a globalised world.

This broadening has changed the way students choose to study in higher education; and has impacted the career patterns of academics and staff working within it. These changes are generating discussions on the career options (including promotions) available to academics. Research on this has particularly flourished in Australia (Probert, 2013; 2014; Williams *et al.*, 2013b) - perhaps under the impact of the 2008 reforms and the emerging 'integrated tertiary environment' they contributed to generate (Williams *et al.*, 2013b: 7). A recent study of college-based higher education in the UK (Healey *et al.*, 2014b) also directed attention to the shape of curricula in this part of the sector.

Studies that have examined contexts other than mainstream higher education where academics do not hold PhDs (HE in technical /college-based education) and non-

tenured appointments both in mainstream universities and colleges – e.g. teaching-mainly and teaching-only appointments (Locke, 2014; Wheelahan *et al.*, 2012; Williams *et al.*, 2013b) enable us to see the emergence of new territories for SoTL. These studies have brought to the fore the need to **diversify promotion models**, and the place of SoTL in enabling this. This work has also emphasised the role of academic identities - the entwinement with academics' perceptions of the primacy of research, whether real or simply perceived (Bexley *et al.*, 2011); and the **academic confidence needed to engage with SoTL** (Williams *et al.*, 2013b).

These studies point to a need to maintain the concept of a 'big tent' (Huber and Hutchings, 2005), and to foster diversity in the way SoTL is practiced to accommodate newcomers in a highly diversified sector. Diversification has generated the concept of *contextualised scholarship* – that is, knowledge production/co-production based on the premise of solving problems in the field of practice and the wider social and global context (Williams *et al.*, 2013b) – so a kind of conflation of SoTL with the scholarship of application. This points to the need to explore new directions for SoTL - akin to 'mode 2' type knowledge (Gibbons *et al.*, 1994); that is action-based, and applied knowledge engagement in contexts exogenous to higher education. This would better reflect the aspirations of academics in college-based higher education, and enable them to link scholarship to problems in the industry or the wider world. The challenges of developing HE cultures in this broader sector, and of enabling more cross-sector mobility (Wheelahan *et al.*, 2009), also highlights challenges and opportunities for SoTL (and scholarship more generally) in a constantly morphing HE sector, with an increasingly casualised workforce. No large-scale study that we are aware of has specifically addressed the issue of SoTL in private for-profit organizations. This however would be particularly useful in the UK where private providers are increasingly subject to the same level of regulatory scrutiny as other institutions.

2.6 Summary

There is great variety in the way SoTL is understood. Examining this closely will enable us to establish its inherent characteristics at this point in time, bearing in mind that the concept is not static, and the definition evolves as practices evolve. The summary of definitions in this section indicates that SoTL activities take place at different levels of the system (from the *micro* level of individual and departmental practice, to the *macro* level of policy and international communities). SoTL covers

different concepts that include quality and enhancement of learning; excellence and recognition; and pedagogic research; there are also emergent tendencies to apply SoTL in solving work-related problems. The need to provide more clarity is evident if SoTL is to be embraced by individuals and institutions within frameworks that can be considered valid within a very diverse sector, to shore-up progress with recognition.

The emerging trends in recent publications include – a broadening of the field of SoTL to include addressing values and attributes in a globalised world; and a broadening of the actors within this field to include students as partners/researchers, and new comers to the higher education (hourly paid; college-based tutors); digital scholarship. These trends consolidate the view that SoTL needs to maintain its status as a 'big tent', to include other forms of tertiary education, lifelong learning, MOOCs, and possibly some aspects of secondary education; and seek to help institutions develop more complex understandings of academic practice, scholarship, and career pathways to address the needs of an increasingly mixed sector (Williams *et al*, 2013b) and stratified profession (Locke, 2014).

3.   SoTL in the disciplines

3.1 Optimal locus for impact

There is a strong body of research that focuses on SoTL in the disciplines. McKinney (2010) sees disciplinary contexts as the starting point to engage academics with SoTL. She lists additional challenges that are important to consider and reflect upon in each discipline:

> [The] need for more SoTL on learning, more SoTL work on graduate
> student teaching-learning in addition to undergraduate, more SoTL at
> levels beyond the classroom level, spreading interest in this work to more
> individuals and departments, increasing our involvement of students in
> this work as co-researchers, and increasing replication of this work within
> the discipline but across institutions as well as across […] international
> borders.
>
> (McKinney, 2010:105)

The **discipline** is indeed a critical space for the adoption and adaptation of SoTL (Healey, 2000; Huber and Morreale, 2002; Potter, 2008, Coppola, 2013; Cleaver *et al.*, 2014); this to a large extend reflects the pivotal role played by the discipline in an

academic's sense of identity (Potter, 2008; Becher and Trowler, 2001), and by the departmental unit where the discipline is enacted both through research and teaching (Kreber, 2009).

Explorations of student learning within disciplines do allow individual academics to experiment with methodologies to further increase understanding of student learning at course and disciplinary level. These local investigations into student learning inform practices and processes at the discipline level when they are shared. Some of the literature suggests that they can be aggregated at the institutional level to shape the teaching and learning environment on a larger scale (Bernstein, 2013). Proposals have also been made to seek to affirm the role of 'discipline-based education' (another term for SoTL) (Singer *et al*., 2012). The difficulty of transfer across contexts is however problematic, and has been explored in studies that point to the necessity to **explicitly engineer transfer** strategies (Tuomi-Gröhn et al, 2003) as it does not occur naturally; the **'tribalism' of disciplines** as an obstacle to transfer (Becher and Trowler, 2001) and **cultural resistance** to change and import (Trowler, 2008; Alvesson, 2002; Alvesson and Sveningsson, 2007) are significant barriers. Clearly some further research is needed to explore the extent to with disciplinary-based SoTL can have significant traction beyond the confines of its discipline; and the potential of SoTL in promoting trans-disciplinary knowledge. This might provide a way forward to establish the legitimacy for SoTL that has been shown to want in disciplinary units, in the previous section.

3.2   Discipline-specific approaches to SoTL

Methods used by different disciplines to undertake SoTL tend to reflect specific disciplinary epistemologies (Huber and Morreale, 2002). Much work has been carried out on disciplinary epistemologies and the relation to cultures and beliefs about the best ways to teach, assess and research students, over the past decades (Donald, 2009; Fanghanel, 2009; Huber and Morreale, 2002; Kreber, 2009; Shulman, 2005; Trowler *et al.*, 2012). Lee Shulman has shown how epistemologies translate into 'signature pedagogies' (Shulman, 2005: 53-54) – for example the way lawyers learn the logic of argumentation through 'case dialogue' teaching methodologies; or the interplay between instruction and critique in a design studio, and how this contrasts with 'mathematically intensive' forms of teaching on an engineering programme. In the UK, this work is often based on Tony Becher's seminal study of 'academic tribes

and territories' that drew attention, from a sociological perspective, to the impact of disciplinary epistemological beliefs on academic identities (Becher, 1989).

The diversity of approaches has been well rehearsed, and the role of epistemologies in SoTL has been analysed in major studies and reviews (Healey, 2012; Healey and Jenkins, 2003; Huber and Morreale, 2002; Hutchings, 2000; Jenkins *et al.*, 2007). The relation of SoTL inquiry to student development has also been explored, and contributes to a large body of literature on ways of learning in the disciplines (Donald, 2009; Hounsell and Anderson, 2009; Kreber, 2009). There is therefore an array of methods which represent the conventions of the various disciplines engaged in http://www.sotl.eu/documents/resources.html). The present literature review has not noted anything that has significantly added recently to this aspect of SoTL. As previously noted, an emphasis on trans-disciplinary work, and transfer to industry-based problems, might help advance the status of SoTL in HEPs.

A focus on grey literature (websites; blogs; online communications) has enabled us to identify some emerging trends of SoTL work across all disciplines - developing **undergraduate research** (and research-led curricula); a tendency for academics engaged in SoTL to work **collaboratively**, across disciplines, and with students; and new forms of dissemination with increased emphasis on using **social media**. We now turn to those.

3.3 Focus on undergraduate research

The focus on undergraduate research gained significant traction within the last five years within SoTL across the UK, US, and Australia (Brew 2013; Healey, 2009, 2010a, 2010b, 2014a; Cuthbert *et al.,* 2012; Hensel, 2012). The Council on Undergraduate Research in the US and the British Council on Undergraduate Research represent centralised hubs for this type of research.

A compilation of recommended practice to develop undergraduate research published by the Council of Undergraduate Research included:
- Sustained undergraduate research opportunities
- Clear expectations between academics and students on the course of research
- Putting students' ownership for scholarship at the forefront of research goals
- Developing accessible, constructive dispositions among mentors

Rowlett and colleagues suggest that the type of academics who engage in this endeavour are 'scholarly faculty' (Rowlett *et al.*, 2012). This does not go so far as to suggest that SoTL academics are more suited than others to lead undergraduate research. However, SoTL academics who value scholarship in research and teaching have dispositions towards mentoring and guiding students through a reflective research process.

Healey *et al.* (2014a) compiled recommendations to develop research-based curricula in courses in the first year and capstone experiences (including several case studies and self-assessment tools). While much of the literature to date addresses the benefits to student learning, there is little research to suggest how undergraduate research informs staff research agendas, or impacts the discipline. Healey and his colleagues identify as an area for further research the extent to which academics engaged in undergraduate research programmes or courses expand their own scholarly activity (Healey *et al*., 2014a: 54).

3.4 Collaborative interdisciplinary SoTL to build capacity

Interdisciplinarity applied to individual work can open the door to new strategies to analyse the classroom and fruitful exposure to different epistemic beliefs; at the same time, applying different disciplinary methodologies can prove problematic (Huber and Morreale, 2002). Tremonte (2011) has suggested that using different disciplinary methodology opens up horizons for academics – thus quantitative researchers may get involved in interview methods, and learn from this; qualitative researchers may also learn from statistical approaches. This type of cross-pollination of ideas has been documented as one of the many benefits of interdisciplinary teams in addition to a safe space for novice scholars to engage with SoTL (McKinney, 2013; Bossio *et al.,* 2014; Davies et al., 2010; Tremonte, 2011).

A few examples of this type of collaborative SoTL work can be found within the Institute for SoTL (Canada) where a specific grant program encourages multidisciplinary collaborations. One US project, *The Visible Knowledge Project* (VKP) (2000-2005), led by Randy Bass and Bret Eynon, included academics from different institutions and different disciplines in interdisciplinary collaborative

research. The project examined the use of technology in the humanities and social sciences, using SoTL as a vehicle to establish effective practices based on student learning. To support this work, academics organised annual meetings, phone conversations, centralised online spaces to share reflections and sustain progress between annual meetings, and writing residencies to focus on the dissemination of work. The 72 project participants from multiple disciplines were encouraged to focus on an issue related to student learning, establish methods for researching the issue, analyse the results, and disseminate their findings in public (Bass and Eynon, 2009).

The pooled methodologies, across a range of social sciences and arts and humanities disciplines, included: textual analysis of online discussion forums; think-aloud methodology to understand intermediate cognitive processes in maths, English, and history; content analysis of student-created web sites; analysis of i-clickers to increase student engagement in discussion. These methodologies and the ability to share them across disciplines strengthened the capacity for individual members to transfer these strategies to their own disciplinary and institutional contexts. Many members of this project have since moved into senior administrative positions within universities which may signal the potential impact of SoTL leadership on promotion and educational development policies. Whereas we have not identified any research on the impact of SoTL on executive development, this is an area worth investigating. The potential for diversifying the profile of university executives is significant; on the other hand, the ability to influence over a short-term of office in contexts where policy agendas are diverse and fast-changing, remains uncertain.

3.5 Innovative SoTL dissemination

The main observations arising from the literature are the increased focus on open access; and the emphasis on collaborative work. In Canada, the Institute of SoTL sponsors the TransCanada Learning Innovation and Collaborative Inquiry Research grant program to support collaboration on a national scale. The case of CUR discussed above is also a unique example of **capacity-building beyond institutional boundaries** through writing groups who meet at the International Society for the Scholarship of Teaching and Learning annual conference.

Explorations in digital scholarship speak to the emergence of publishing collaborative work and the impact of social media (Scanlon, 2014: 15) and the impact of open and networked practices (Weller, 2014). Academics engaged in SoTL make their work

visible through online formats such as blogs and social media. Whilst these are not seen as traditional publication outlets, the visible representation of the teaching and learning process provides key moments of reflection at an individual level, and ideas for other academics interested in teaching and learning.

Pearce and colleagues describe academics' efforts to publish outside of the traditional outputs through social media as imprinting a 'personal brand' or 'digital identity' (Pearce *et al.,* 2012). There are examples of such productions that seem to provide their authors with a regular audience, as seen in The Open University's philosophy lecturer Nigel Warburton's podcasts, Kansas State University's Michael Wesch's video essays on teaching and learning in higher education, and attempts by academics to maintain blogs on their own research efforts or use Twitter to broadcast recent developments (e.g. Derek Bruff , Mark Sample, Cathy Davidson, Mick Healey). In the US, Elon University's Center for Engaged Learning leads the current effort to define SoTL and disseminate SoTL practices through a series of video interviews (97 total at this time) across nations. The reach available through social media begs the question of how this could transform academic work or SoTL. While social media might allow the proliferation of SoTL methodologies, it is important to mind the risks associated with the 'popularity effect', and to bear in mind that the need for translation and adaptation to local contexts is crucial to success. A recent report on research metrics has also highlighted the necessity to focus on impact rather than 'viral' dissemination (Wilsdon *et al*., 2015).

3.6 Summary

Discipline specific approaches to SoTL have been examined in the literature through the lens of disciplinary epistemologies. Different discipline approaches inquiry into teaching and learning differently because of the conventions and beliefs attached to their disciplines. Some studies have also pointed to the structural role of the department where the discipline is enacted (Fanghanel, 2009; Mårtensson *et al*, 2011; Roxa and Martensson, 2009). The review has identified the main trends in the past decade as - an increased focus on undergraduate research; an increase in large collaborative projects; and the use of social media to disseminate. Developing SoTL in the disciplines is a powerful way of understanding, evaluating and advancing pedagogies and practices. Importantly, as discussed in section 5, this needs to link to institutional strategies, so that universities fully harness this body of knowledge, use the data produced through this form of inquiry, and thus transform their approaches

and operations. The potential link of SoTL to 'institutional research' is worth exploring further as a powerful lever to enhance the status of teaching and learning within institutions. The potential held by trans-disciplinary inquiry, and the extent to which SoTL might also impact as a methodology in industry-based environments is worth bearing in mind.

4.   SoTL and educational development

4.1 SoTL as a capacity-building vehicle

Understandings of educational development have evolved greatly in the past decade, to a large extent as a result of the work of educational developers, and of the funding bodies that have supported enhancement of, and research on, teaching; and because of projects that have generated knowledge on the nature of teaching and learning and on the make-up of professional development for HE educators. Whilst progress has been made in understandings of *practice*, research and evaluation work on professional development has pointed to the gap between theory and practice (Chalmers, 2011; Roxå and Mårtensson, 2008; Trowler and Bamber, 2005; Trowler *et al.*, 2012). To a large extent, this is a reflection of the complex endeavour that is teaching in higher education; the complex role of the academic; and the added challenges brought about by the array of disciplines that advocate varied approaches to address the conventions of their field.

This gap has been theorized over the past ten years as an example of the tension between structure and agency, and more specifically of how individuals and groups act within structures that can be enabling or constraining (Fanghanel, 2012; Mårtensson *et al*, 2011; Roxå and Mårtensson, 2008, 2009; Trowler and Wareham, 2007). The field of educational development itself has had to embrace those tensions as national drivers in a number of countries (focused funding to improve student learning and teaching approaches and environments; excellence and recognition initiatives; quality driven enhancement structures) often collide with academics' views and own understandings of their disciplines, and of the crucial role of academic department /school in affecting change. Whilst educational development has been using SoTL to bridge the gap identified between theory and practice, thus bringing the discipline more centre-stage in the way it conceptualises its role, the challenge remains the engagement of university departments (rather than some individuals within them) in SoTL so that institutions benefit more fully.

4.2 SoTL and research

SoTL's richness is not in the model originally devised by Boyer, but in what it has become. There has been much discussion of Boyer's representation of scholarship. The dichotomy it appears to maintain between research and teaching has been underlined, and is persisting; Cousin discerned the re-introduction of hierarchies (Cousin, 2008) within this model, with the scholarship of 'discovery' and 'integration' being seen as more desirable than that of 'application' or 'teaching'. Lewis Elton thought Boyer's model was not supported by any 'convincing rationale' (Elton, 2005) but suggested that the notion of scholarship was close the Humboldtian notion of *Wissenschaft*, which according to Elton, is about learning 'in research mode' (Elton, 2005: 108). This definition somehow condones the relation to 'discovery' and research discussed earlier. Boyer's categories which he saw as 'separate, yet overlapping functions' (Boyer, 1990: 16) are in fact quite normative and remain 'ideal type' descriptions that may indeed, as suggested by Cousin (2008), not be neutral. The tension between teaching and research as it translates in increasingly diverse academic roles, still remains at the heart of the HE system – with different funding mechanisms, different ways of evaluating competence, different structural paths within institutions; and different statuses within the academic community. The 'overlapping' of Boyer's categories is not fully recognized by the academic community; the scholarship of discovery clearly overpowering all others in the academic 'psyche,' and in academic structures. To add complexity, with the current emphasis on 'impact', what now counts as 'world class' research is no longer just 'discovery'. This could provide opportunities for SoTL if its potential could also be harnessed (as suggested by Williams *et al.,* 2013b – see section 2.5) to support innovation and problem-solving in industry.

4.3 Cultivating SoTL in disciplinary communities

Whilst strategies are deployed in universities (and on the PGCert courses discussed in section 5) to develop SoTL among academics at the *micro* level of practice, there is also a strong emphasis on developing sustainable support systems among academics. Regardless of the particular strategy for SoTL support, there is an emphasis in the literature on the importance of creating different types of communities of practice and the potential power of communities engaged in SoTL is stressed by Felten (2013):

Administrative and faculty colleagues may not understand scholarly inquiry into student learning, and some are sceptical of claims about a 'scholarship' of teaching and learning. One way to change their minds is for SoTL practitioners to come together in articulating and upholding norms that reflect the best of our work essential for making the case for institutional resources and support for our work, and even more importantly, for upholding our professional obligations as teacher-scholars.

(Felten, 2013: 122)

In terms of how scholars come together, Healey has recorded a list of strategies to support academics with SoTL that reflect various dimensions of collaborative scholarship and are particularly useful to build capacity, cultivate learning communities, and establish support structures at institutional level.

Mentoring is a practice widely used to support newcomers to higher education. It also has a wide range of meanings; it is a practice more developed in the US than in the UK. Hubball *et al.* (2010) found that effective SoTL mentoring influenced early career academics' focus on research of teaching and learning. Mentors play an important part in connecting experienced SoTL scholars to early academics (Webb *et al.*, 2013; Pleschova *et al.*, 2012).

Cultivating SoTL is a multi-throng endeavour, with points of access at different levels of the HE system, as shown in the framework adopted for this study illustrated in Figure 1. Work at the individual level of practice is essential (as in mentoring for example) and the role of the department (or disciplinary unit) in brokering this complex mind-set-changing is paramount. The work carried out worldwide on 'communities of practice' (Wenger, 1998; Wenger-Trayner *et al.*, 2014) has provided a useful (if limited) framework to theorise the importance of 'peers' and 'peer-learning' to generating active cultures. Milton Cox was a pioneer in experimenting with this approach, is worth referring to as it has been replicated worldwide. We address in the next section the issues of institutional support, which is critical to the success and sustainability of any behaviour- and culture-changing initiative if fundamental teaching and learning transformation is to be harnessed.

4.4 Summary

Collectively, educational development centres frameworks for engaging students in disciplinary learning; for academics these strategies provide opportunities for reflection on practice as well as opportunities to engage with colleagues. In practice however, there are very few examples of large-scale usage of SoTL as a change vehicle, and much still remains to do to capitalise on its potential (Hutchings *et al.*, 2011). Whilst it is important that SoTL initiatives are linked to institutional priorities, it is equally important for institutions to recognise what SoTL might bring to their institution in terms of increased collaborations, and rich reflective learning environments where both academics and students learn to evaluate and enhance practice conjointly, and developing evaluative and reflective attributes that will serve students well in today's complex learning environments, and prepare them for future challenges.

5. SoTL recognition and excellence

5.1 Introduction

Another significant (and yet under-utilised) tool for institutions is the recognition and reward of teaching excellence. As indicated at the outset of this review, recognising and rewarding teaching is a complex matter, mainly because of the difficulty of establishing benchmarks for performance (Chalmers 2011; Copeland, 2014; Locke, 2014; Parker, 2008); and because of the structural hiatuses created by separate funding streams for research and teaching (Trowler *et al.*, 2005) – very changeable in relation to teaching; and the related primacy of research in higher education. It is compounded by other factors already mentioned – the fragmentation within the profession and the under-problematised use of metrics (ACE,2014; Locke, 2012, 2014; Locke and Bennion, 2010; Macfarlane, 2011; Probert, 2013).

5.2 Increased diversity challenge

Role diversification (including as a result of the opening-up of HE to new private or further education institutions) and the pervasive increase in the number of teaching-only positions are possibly the most significant characteristics of the academy today. This state of affairs is intricately linked to the massification effect (Trow, 1973), and to changes to modes, and location, of learning. As a result, academics are involved in an increasingly wide range of activities (some of them conflicting with each other), and academic roles are being re-defined (Locke, 2012, 2014; Macfarlane, 2011).

Stratification of roles has increased over the past decades with the gradual emergence of research-only, research and teaching, teaching and scholarship, and teaching-only (and teaching-focused) roles. This has created a fragmentation across and within institutions (Locke, 2014). Institutions have begun to incorporate these trends into their career structures - with examples in the UK that include 'teaching fellow' and 'teaching scholar' positions alongside the more traditional titles of 'lecturer', 'senior lecturer', 'reader' and 'professor'. Research assessment frameworks (RAE and REF in the UK) have influenced decisions designating academics as 'research active' on 'non active' (Locke, 2014). Similarly, the US sector has also recognised that the number of 'tenured' positions is diminishing the number of teaching positions is increasing (Cummings and Finkelstein, 2012).

The consequences for those in teaching-focused posts with limited career opportunities may not have fully examined yet but it is possible to begin to appreciate the impact on the academy of increased stratification. Questions have been raised for example as to whether academics with teaching, and teaching and scholarship, roles should be undertaking more teaching to free-up time from their research-focused colleagues, at the expense of their own scholarly development (Chalmers, 2011; Probert, 2013). Lecturers on teaching paths often find there is no time to develop a research or scholarly profile and this makes transferring between categories difficult (Cashmore *et al*., 2013). Whilst this trend may have been driven by relatively pragmatic approaches, institutions are beginning to strategically engineer teaching-only positions to enable them to deal with the need for additional student support (in tertiary education with high volume of teaching), or at the other end of the spectrum, to enable them to prioritize research (Probert, 2013: 27-28). In the UK, in the period leading up to the REF 2014 submission, a significant rise in teaching-only positions was noted. This enabled institutions to reduce the numbers of eligible academics, and thereby increase the proportion of eligible staff submitted (Locke, 2014). For those not selected for submission, there has sometimes been a refocusing of their roles to teaching-only positions with significant impact on their identities as academics (Cashmore and Ramsden, 2009; Copeland, 2014).

The question of teaching-only or teaching-focused posts has traction across the whole tertiary sector. In a recent study Healey and colleagues (Healey *et al*., 2014b) noted that 10% of higher education in the UK is delivered in colleges; this figure is higher in Scotland where there is a greater number of colleges than in England.

Academic staff working in such roles in colleges generally do not have the opportunity to be involved in research and to develop their profiles in the same way as academics in higher education institutions; and many have no doctorate.

Healey *et al.* (2014b) note that there is some evidence that academics based in college education are undertaking innovative work with students, often focused on SoTL. Further work is needed on infrastructures to support the academic development of those working on the periphery of higher education in the tertiary sector (Healey *et al.*, 2014b; Wheelahan *et al.*, 2012; Williams *et al.*, 2013b).

An important point to take into account when addressing the academic development of staff on teaching-only posts, is that those are generally part-time or zero hours-type of contracts which makes it difficult for them to engage in formal professional development such as postgraduate certificate teaching programmes (Chalmers, 2011). Given the importance of their role in teaching students, their case needs to be considered, as it is not possible to accommodate scholarship at present in zero-hour contracts.

5.3   Rewarding teaching excellence

Given this diversity in the sector, it is clear that schemes to reward teaching excellence will need to evolve. At present, institutions worldwide have developed schemes to enhance and champion teaching and learning locally, and to enable academics to be competitive in national awards which have also appeared in the wake of examples in Canada, the US and the UK. These schemes are varied, as are the criteria determining how they make these awards (Chalmers, 2011).

A recent international review of the literature on institutional teaching awards (Hugget *et al.*, 2012) found that the main impact of these schemes included **career advancement** with increased administrative responsibilities and possibly less time for research; and **public recognition** through publication. The study also reported academics' perceptions of **improved teaching** (though the perspective of students was not included). The overall conclusion was that teaching awards have potential for positive impact, but also negative consequences - less time; and no strong evidence in relation to academic staff retention (Hugget *et al.*, 2012).

A study from New Zealand showed that institutions can introduce a range of schemes to support SoTL (Haigh *et al*., 2011). The Australian Faculty Scholars Network which is supported by the Learning and Teaching Council provides a scheme focused on developing individual academics to become future leaders in learning and teaching through funding of small projects and relief from teaching (Creanor, 2014). Whilst many agree that engaging in scholarship about teaching and learning is beneficial, the issues of time to 'do' SoTL and of the support needed to develop expertise to 'do' it are important; giving time to individuals to complete a SoTL project is a mechanism used by many institutions. The Caledonian Scholars and Associates initiative launched in 2008 drew on the Australian approach and enabled staff to bid for SoTL projects to support career progression; it has now been extended to include a senior scholar scheme (Creanor, 2014). Other institutions such as Macquarie University in Sydney Australia have introduced schemes to provide funding based on activities undertaken by staff which, using a Teaching Index (a new iteration of what was the University of Sydney Index in the 2000s), converts activities to points and then small amounts of funding. Similar programmes are emerging across the world – see for example in Asia.

Of course, as previously discussed, funding of projects is unlikely to produce a lasting culture change. There is great value in participating in collaborative programmes such as the SoTL international collaborative writing groups mentioned in section 3.5, which have been perceived by participants as providing useful support to new scholar writers (Marquis *et al*., 2014). Developing academics to find value in doing SoTL can benefit institutions (Shreeve, 2011; Hutchings *et al*., 2011). Martensson and colleagues (2011) also found that teachers who are rewarded for their focus on student learning are reflective and disseminate this practice through scholarly discussions, conferences and publications.

In terms of the overall value of teaching awards, as previously indicated, a number of individuals believe that gaining this type of recognition is *not* seen by departments as equivalent to gaining a research grant; it is therefore not always seen as a significant achievement (Skelton, 2005). Whilst there is often some kind of financial award included, many would prefer sustained recognition for their work such as promotion and/or an increase in salary (Chalmers 2011; Cheng, 2014). The value reported for individuals is very similar to findings of the NTFS 2012 Review, and includes continued innovation, engagement with scholarship, leadership opportunities.

5.4 Assessing institutional excellence

As mentioned earlier, promotion is the preferred marker of recognition for academics. Studies focused on the inclusion of teaching scholarship in promotions, have often concluded that whilst there have been some promotions based on teaching achievements, there continues to be a bias towards research achievements in promotion decisions, particularly at the higher level of readership (or equivalent) and professorship (Cashmore and Ramsden, 2009; Copeland, 2014; Greenbank, 2006; HEA, 2009; Jenkins and Healey, 2005; Parker 2008; Trigwell, 2013). Gaining a clear picture of progress in this area is difficult due to the variation in implementation of policies and difficulty in gaining data from institutions about promotions.

5.4.1 Criteria

The research cited here confirms that criteria to assess teaching excellence are often lacking or unclear, and differ across institutions. It appears that these are more explicit in institutions with more mature teaching and learning infrastructures who have benefited, for example, in the UK, of initiatives such as the Centres for Excellence in Teaching and Learning (Cashmore and Ramsden, 2009). Cashmore, Cane and Cane (2013) cited examples of criteria from a range of higher education institutions internationally - available to view online such as the University of Bristol in the UK, and Duquesne University in the USA. Our review of a range of schemes highlighted the following common key criteria:

- National and international engagement
- Leadership related to teaching and membership of strategic committees
- Successful programme development
- Production of high quality learning materials including online
- Publications in peer-reviewed scholarly journals and income generation
- Honours, awards and prizes
- External examinership and membership of external bodies related to the discipline and teaching and learning
- Impact of research and scholarly work
- Evidence of high quality teaching

The HEA have also examined some institutional schemes in the UK and Australia and produced a series of three reports (HEA 2013 a, b and c). These reports provide

advice on the scope of activity that could be included, the sphere of influence these academics should have and the sources of evidence (HEA 2013b). Whilst the inclusion of criteria related to teaching and scholarship is a positive step, there remain issues about how these are locally defined particularly in respect of weighting SoTL against discipline-based research - which remains the benchmark. The suggestion that teaching excellence should be read in connection with other facets of the role, and research excellence (Gunn and Fisk, 2013) is pertinent. We also suggest that in the context of a national excellence framework**, institutional, departmental as well as individual indicators should be used** as they all impact on the student experience.

5.4.2 Evidence

Another issue for promotion panels relates to the evidence on which judgement is made. There are a range of types of evidence that could be used for assessing teaching and learning, including peer observation and reflections on these; evidence of scholarship of learning and teaching through publications; materials produced to support programmes and student learning; teaching portfolios; students' evaluations of teaching and lecturers; letters of support from line managers and colleagues (Gunn and Fisk, 2013). The HEA benchmarking work provided some useful guidance on this (HEA, 2013b). As institutions often build their criteria in relation to those of national awards, we develop further the section on evidence in section 6.2 where we examine national awards.

5.5 SoTL as institutional capital

Institutions can harness SoTL to enhance the quality of teaching across an institution to directly impact on the status of SoTL across higher education. This perspective takes us further than the 'distinction' or 'excellence' route, as it seeks to engage all academics, not just a few.

The literature on institutional change makes reference to the importance of context and culture, and the need to work at different levels of practice (Alvesson and Sveningsson, 2007; Fanghanel, 2012; Kezar and Eckel, 2002; Mårtensson *et al.*, 2011; Trowler, 2008; Trowler *et al.*, 2012). This is an important point for institutions seeking to implement change. In a theoretical approach akin to the model adopted for this review, the broad tertiary sector study carried out in Australia by Williams *et*

al. (2013b) mentioned in 2.5 as mode 2 SoTL, has highlighted the role of culture in enhancement activities, distinguishing three levels: at the *macro* level determines the strategy to pervade each level; the *meso* level contains the senior managers enabled to carry out the strategy; at the *micro* level reside academics and students. In a similar way, Hutchings and colleagues (Hutchings *et al.*, 2011) have shown the importance of a multi-level approach to embedded SoTL. The relation and coordination between the different levels of practice necessitates 'institutionalizing' strategies; this necessity to work at all levels of the institution is critical.

Clarity, and coherence of the message to the academic community is crucial to engage in change initiatives. Marcketti *et al.* (2015) established a set a factors that influenced success of an institutional SoTL initiative within a large research-intensive university in the US.   The strategies they identified to enable SoTL at institutional level included having a clear definition of SoTL at institutional level; adjusting ethics policies to provide simpler forms for academics engaged in SoTL; using SoTL-type language in job descriptions; and rooting SoTL work within the discipline and departments rather than on a purely individual basis.

The need to harness the community dynamic of SoTL and impact beyond the walls of the institution is developed by Dan Bernstein (2013) describing SoTL practitioners as 'cosmopolitan assets' for their institutions. Bernstein's stance is that the work of individuals benefits the local context (students and departments) as well as the institutional infrastructure of the university. Established SoTL practice engenders further practice within the institution, makes teaching and learning visible, and represents 'an important investment in the capacity of its community members' (Bernstein, 2013: 35). In this perspective, the emphasis is less on whether an individual is focusing on teaching or on research, and more on the cultural capital this individual represents within institutions and educational systems. The methods to enact change may involve working with academic development units; coordinating with deans, provosts/ vice-chancellors; and effectively marketing SoTL initiatives. A significant strength is to generate collaboration with other institutions to promote institutional SoTL work. Whilst recognition of SoTL can bring positive change in an institution, any progress will remain framed by the at present intractable issues related to the separation of teaching and research, and the inequalities within the sector related to the fragmentation within the profession mentioned throughout this review.

5. 6 Summary

A key to enhancing the status of teaching and SoTL activities in promotions is the institutional culture. The examples mentioned in this section are useful, however, many institutions do not make any reference to SoTL in their promotion criteria – or if they do, it is in a diffuse manner that lends itself to subjective interpretation (a point also emerging from this study's survey data).

We have suggested other ways in which institutions can capitalize on SoTL; this includes working at different levels of the system; offering clarity and coherence in relation to criteria, evidence, and an institution's definition of SoTL – if a generic definition is given, it is likely to need to address several different types of scholarships such as for example scholarship of research; and the scholarship of applied industry-related or community-based knowledge as discussed in the case of college-based HE.

6. National and international SoTL initiatives

6.1 Higher Education Teaching Qualifications

Whilst until recently it was relatively unheard-of to speak of 'teaching qualifications' in higher education, great steps have been taken in this direction as a result of the in-roads made in the UK with the United Kingdom Professional Standard Framework (UKPSF); evidence of similar trends have also emerged from Australia (Chalmers *et al.*, 2013). Career development in higher education includes opportunities to access funded educational development; work allocation enabling academics to undertake research into teaching; and grants and fellowships opportunities. Funded educational development in the UK is often focused on teaching development programmes which are progressively gaining legitimacy as evidence of competence to teach in higher education (Lemass and Stace, 2010). The notion that training is necessary for higher education educators is borne out by evidence that stems *inter alia* from doctoral education where doctoral candidates who teach are expected to undertake training (Brownell and Tanner, 2012; QAA, 2011).

In the UK, the recent policy initiative involving the Higher Education Statistics Agency (HESA) in collecting data about the number of academics with teaching qualifications has generated an increase in the number of academics gaining this qualification.

Many UK institutions are now offering programmes accredited by the HEA to offer recognition against the UKPSF (HEA, 2011). First introduced in 2006, revised in 2011, and reviewed in 2015, the UKPSF has become a guide to professional development and progression for teaching (Chalmers, 2011). The UKPSF identifies four levels of fellowships matched against descriptors and individual roles and responsibilities. It is based on three dimensions practice which include:

- The range of activities an academic is engaged with in the course of his or her practice
- A catalogue of core areas of knowledge expected from a he educator
- A set of professional values

At its core, there is the expectation for all 'Fellows' to engage in continuing professional development and incorporate research, scholarship and evaluation of professional practice.

Latest statistics indicate that there are presently 9,705 HEA Associate Fellows; 46,689 Fellows; 1,949 Senior Fellows; and 303 Principal Fellows (HEA figures as of 21/01/2015). This is a significant achievement nationally, and a strong signal that the skills needed to teach in higher education necessitate an engagement with literatures and theories in the field of teaching and learning, and inquiry into practice, rather than being dependent on innate abilities or a set of 'recipes' to be a successful educator. Clearly, achieving a qualification certifies an attainment level and an awareness of professional values; it does not certify how an academic operates in practice, in any given context. Whilst it is reasonable to infer that this has allowed institutions to build capacity in teaching and learning expertise, and reward and recognise competence and expertise, it is difficult to assess the impact in terms of improved professional and pedagogic development. In the context, in the UK, of making public staff qualifications, has led to concerns about the motivation of institutions in reporting 'qualified' staff (Copeland, 2014; Locke, 2014). No research has yet looked into the impact of HESA data collection and the resultant profiles of institutions in terms of qualified staff, on student outcomes or student experience.

A similar framework exists in Australia (Chalmers *et al.*, 2013). The Australian University Teaching criteria and standards framework was developed to establish clear criteria to define and assess teaching competence, and the nature of professional development. This framework includes seven criteria for different levels

of seniority (from lecturer to professor) which are coherent with the five areas of activity of the UKPSF (HEA, 2011). Similarly in Ireland, a professional framework is being developed. Frameworks of this type provide guidance for institutions and staff on the nature of effective teaching, pointing to the necessity to consider teaching practice as an object of inquiry, applying reflection and scholarship. They may in the future inform any national excellence framework.

6. 2 National awards frameworks

Over the past decade or so, the question of excellence has been critically explored both at the level of distinguishing individuals exemplified in the NTFS (Gunn and Fisk, 2013; Chalmers, 2011; Skelton, 2005; 2007) and groups - with specific reference to the Centres for Excellence in Teaching and Learning initiative (Saunders *et al.*, 2008). The main issues identified in these studies have been in relation to:

- The lack of transparency of criteria and processes (Chalmers, 2011)
- The 'relativity' attached to the notion of excellence and its often ignored 'situated', contextual dimension (Little and Locke, 2011; Little, B. *et al.*, 2007; Skelton, 2007)
- The dangers of reifying practice – and the related contention of giving in to a culture of performativity when excellence is described in terms of a series of attributes and competences (Gunn and Fisk, 2013)
- The failure to transform 'mainstream' practice when focusing on individual awards (Fanghanel and Trowler, 2008).

Involving students in the process through requiring evidence of student impact, or direct involvement of students on panels, can only partially address these issues.

In terms of the value of these rewards, some studies have found that gaining this type of recognition is not seen by departments as equivalent to gaining a research grant (Chalmers, 2011); some research indicates that winners would prefer sustained recognition through promotion and/or an increase in salary (Chalmers, 2011; Cheng, 2014). Overall, whilst this type of awards may act as a catalyst to motivate academics to be innovative, and to serve as a beacon of excellence, the recommendations raised by Gunn and her colleague in their report on this topic, still stand (Gunn and Fisk, 2013) – namely the need to develop methodologies that will link excellence to student learning outcomes (with a warning in respect of using

learning analytics); the need to theorise about what excellence actually means (and the suggestion for a sector-wide model linked to career stages); and the challenge of how excellence is articulated with wide-ranging disciplinary ethos (Gunn and Fisk, 2013:48-49). We can add that excellence of the few needs to be intentionally harnessed by institutions to enhance levels of competence across the board (Little and Locke, 2011; Fanghanel and Trowler, 2008; Little *et al*., 2007; Skelton, 2007)

In the UK, a formal evaluation of the National Teaching Fellowship scheme (NTFS) (Rickinson *et al.*, 2012) through a survey of 108 NTF respondents, Rickinson and colleagues showed that the scheme had had positive impact – especially on individuals, both personally and professionally. The impact on colleagues was more nuanced - 16% disagreed or strongly disagreed that they had had an impact on colleagues; and 18% reported that they were not sure (Rickinson *et al*., 2012: 25). This could be read with relation to some NTFs' recognition that the award might have had a negative impact on their colleagues; and the fact that their institutions might have been indifferent to the award. NTFs reported a positive impact of the award on students through innovative teaching projects, although 18% were not sure they could attribute an impact (Rickinson *et al*., 2012: 24). The positive impacts reported included recognition, networking, improved teaching and career development (although the latter point was also more mixed). A small project (Eales-Reynolds and Frame, 2009) identified as an important benefit the opportunity to develop and use international networks. Research carried out in Canada on the equivalent 3M Fellows scheme indicates that the areas of impact identified include publications, involvement with the Society for Learning and Teaching in Higher Education, and the opportunity to join the 3M retreat (Ahmad *et al*., 2013). Notably, 3M Fellows do not receive money as part of the reward. A European initiative was also launched in 2011 by the Central European University to reward teaching and promote teaching recognition at a European level.

As previously mentioned, it is difficult to find a consensus on criteria to assess individual teaching excellence. Selection for the UK National Teaching Fellowship Scheme is based on three criteria against which nominations are judged on individual excellence in practice; raising the profile of excellence in the communities where they operate and impact; and developing excellence (HEA, 2014: 4-5). The Australian awards for University Teaching (Office for Learning and Teaching, 2015) like the NTFS, provide recognition for quality teaching and outstanding contribution to student learning. These awards encompass a range of recognition opportunities –

e.g. fellowships; senior fellowships; grants; and awards (Office for Learning and Teaching, 2014). The criteria include evidence of approaches to teaching and learning; developing curricula and resources; evaluation of practice; and innovation, leadership or scholarship (Office for Learning and Teaching, 2014: 18). The award for Australian University Teacher of the year requires an exceptional record of enhancing learning, evidence of educational leadership and contribution to SoTL – the latter being the main focus for this award. Evidence includes a written statement from the individual related to the criteria within a word limit, a CV and references to support the nominations and up to two pieces of supporting evidence. In the US, the US Professors of the year awards programme recognises outstanding teachers who have influenced and enhanced the learning of undergraduate students. All these schemes have in common that recipients of these awards should be outstanding and able to show impact on student learning whilst they all use quite different selection criteria.

6.3 Summary

International initiatives to raise the profile of teaching and learning in a systemic way through the introduction of a national framework and through high profile distinction of outstanding individuals have emerged in several parts of the world. Whilst the impact of national excellence awards is still uncharted, the role of the UKPSF framework is significant in bringing a vision of academic practice, and in raising awareness of the complexity of teaching in higher education, and of the need to develop teaching **alongside** research, as part of an academic portfolio. From this perspective, the Higher Education Academy's UKPSF provides a framework to define a national consensus which offers great potential. In order to avoid the dangers of institutional instrumentalisation (using this framework to enhance an institution's ranking potential) – an argument used by some to deny any legitimacy to the advancement of SoTL as an important element of HE - it is crucial to also consider alternative possibilities for institutions to engage in SoTL. In particular, institutions might consider what they could gains from the engagement of their academics in international SoTL networks that replicate research networks, but are perhaps less capitalised on at this point in time.

When it comes to reporting institutional progress and success, the comparison with the way this is done for research is tantalizing. League tables do impact on the perception of an institution and its reputation or prestige (Locke, 2014), and this

could give a chance to make visible institutional excellence – though some caution would need to be deployed in relation to the validity of measures based only on staff qualifications, as indicated in section 6.1. Another way of bringing research and teaching on a par would be to capitalise on the **impact** dimension of SoTL - the potential to envisage SoTL as a mode 2 form of knowledge engagement; Williams and colleagues (2013b) identified that in what they call the 'tertiary sector' (outside of universities) SoTL, as a means of reflecting on, evaluating, and transforming practice, is an asset for an individual to work with industry - as a broker of applied knowledge, with the potential to 'enhance learning, problem-solving and innovation in enterprises and communities' (Williams *et al*., 2013b: 8). Another area of capitalization for a redress of the teaching-research balance might be to develop scholarship in research to deliver research-informed teaching across a now extended sector.

7. Student engagement with SoTL

7.1 Context for student engagement in higher education

The student engagement agenda in contemporary higher education reflects the interests for a number of stakeholders with varied motivations – including addressing political drivers, such as enhancing teaching quality and the student experience; addressing pedagogic and radicalising approaches that attempt to challenge ingrained structures; and relational discourses between staff and student. This has generated new ways of thinking about student participation in learning and teaching and a growing body of international research on this topic (Coates, 2006; Healey *et al.,* 2014a; Kahu, 2013; Krause, 2005; Kuh *et al*., 2005; Healey *et al*., 2010a; Bovill *et al.*, 2011; Cook-Sather *et al.,* 2014).

7.2 Recent additions to student engagement literature review

A comprehensive review of student engagement literature undertaken in 2010 (Trowler, 2010) showed that a sound body of literature related student involvement and engagement to persistence, achievement and success (Trowler, 2010: 2). More recently, Healey and colleagues (2014a) highlighted four main areas in which students can act as partners: learning, teaching and assessment; subject-based research and inquiry; the scholarship of learning and teaching; and curriculum design and pedagogic consultancy.

Publically funded initiatives have been established and are becoming embedded into regional and national support for student engagement and partnership across the UK. The Student Participation in Quality Scotland initiative, established in 2003, is now firmly integrated across the Scottish further and higher education network and works to ensure that students are able to engage as partners at all levels of quality assurance and enhancement activities. The Student Engagement Partnership works with academics, students, senior managers and student engagement practitioners to advance student engagement work in colleges and universities across England. The Wales Initiative for Student Engagement established in 2009 is a collaboration of sector organisations working to create a culture of meaningful partnership between educators, students' unions and students across Wales. In the context of this literature review, these agencies offer practical advice on and experience of student partnership. We focus here on works addressing student engagement in SoTL and disciplinary research.

7.3 Frameworks for student engagement

The concept and meaning of student engagement has evolved over time, and continues to be re-defined (Trowler, 2010); Buckley suggests that it is suffering from a 'lack of conceptual clarity' (Buckley, 2014: 2). Little and colleagues (2009) have suggested that it is important to distinguish between the **collective engagement** of students in decision-making about teaching and the curriculum, and their **individual engagement** with their own learning (Little *et al.,* 2009). In 2012, the QAA reified this distinction in its Quality Code. *Chapter B5: Student Engagement* sets out two domains for engagement, the first that it relates to 'improving the motivation of students to engage in learning and to learn independently' (QAA, 2012: 4), and second that it relates to 'the participation of students in quality enhancement and quality assurance processes, resulting in the improvement of their educational experience' (QAA, 2012: 4)*.*

7.3.1   Engagement as partnership

With a growing emphasis on engagement and partnership across the sector, some universities are adopting terminology in their strategies and mission statements that seek to recognise students as partners as well as participants (not just recipients) in their educational experience. The most recent Higher Education Academy report on

students as partners (Healey *et al.,* 2014a) clearly poses 'partnership' as the process of, or catalyst for, engagement:

> Student engagement has become a core aim for the sector and, increasingly, is being linked to ideas about students' roles as partners in their higher education communities.
>
> (Healey *et al*., 2014a: 4)

Engagement in this context, posed as a 'relationship' where *'*all participants are actively engaged in and stand to gain from the process of learning and working together*'* (Healey *et al*., 2014a: 7), has been presented as rooted in social constructive theories of learning:

> [The] social constructionist view of knowledge argues strongly for greater democracy in negotiating what counts in educational practice, the local embedding of curricula, the breaking of disciplinary boundaries, the lodgement of disciplinary discourses in societally relevant practices, educational practice in societal issues, and a shift from subject and [student]-centered modes of education to a focus on relationships.
>
> (Gergen, 2001: 136)

This characterisation of **student engagement through partnership** places value on creative exchange, collaboration, and group construction, whilst trying to challenge current dominant discourses related to commodification of higher education (NUS, 2012; Streeting and Wise, 2009). The emphasis on an active involvement model, developing student autonomy as critical inquirers, is at risk if the framing of engagement is simply a 'requirement' of universities to service students as paying customers, like a commodity or a 'unique selling point' (Collini, 2012; Baron and Corbin, 2012). Given this context, and the current attention to the engagement of students in research and scholarship, it is timely to gather information on established and emergent pedagogic research and practices involving students.

7.3.2   *Dimensions of engagement*

Trowler and Trowler (2011) provide a framework to examine student engagement (SE) that identifies three dimensions represented as axes along which grade individual initiatives or studies according to their focus on any one of the dimensions

- 0 denoting 'no patent concern' through to 10 denoting full involvement and institutional commitment to the roles of students in decision making. These axes are 1) that SE can be mapped onto a spectrum concerned with *individual student learning*; 2) that SE is seen in *structure and process* within an institution, such as in quality mechanisms and governance; and 3) that SE relates to *identity*, concerned primarily with engaging specific groups, through fostering a sense of belonging at various interfaces, such as module, course, discipline, and institutional levels. This framework usefully adds to the QAA categorisation, by introducing the identity dimension and the notion of belonging which is a key aspect of retention and success (Thomas, 2012).

7.3.3   Authenticity of engagement

In order to move beyond student engagement as a 'compliant' or 'procedural' process argued as being ineffectual by Crick (2012), Lawson and Lawson referenced an extensive body of research which highlights the effectiveness of authentic and action-oriented forms of engagement (Lawson and Lawson, 2013: 445-446). Reeve (2012: 161) describes this as 'agentic engagement'. The potential then, is for student engagement in learning and teaching research and practice to take an active, participatory role, which develops students' critical inquiry, reflection and reflexivity. Similarly, Healey and colleagues argued that:

> [A} partnership approach is valuable because it enables a more authentic engagement with the very nature of learning itself, understood as an experiential process of reflection and transformation, in relation to oneself and with others.
>
> (Healey *et al.*, 2014a: 17)

7.4 A system-related framework

Given the emphasis of this literature review on the different levels of the HE system, it would be possible to theorise student involvement at each of the levels identified in section 2, and examine the levels at which students are able to engage. This complements the authenticity model (Lawson and Lawson, 2012) by enabling a reflection on the existing structures and practices that either facilitate or prevent students from becoming partners.

Macro level: Students co-researching and co-disseminating nationally and internationally

Meso level: Students act as consultants and influencers at institutional level

Micro level: Students working with academics at course/ curricular level as consultants, co-designers, and as co-researchers
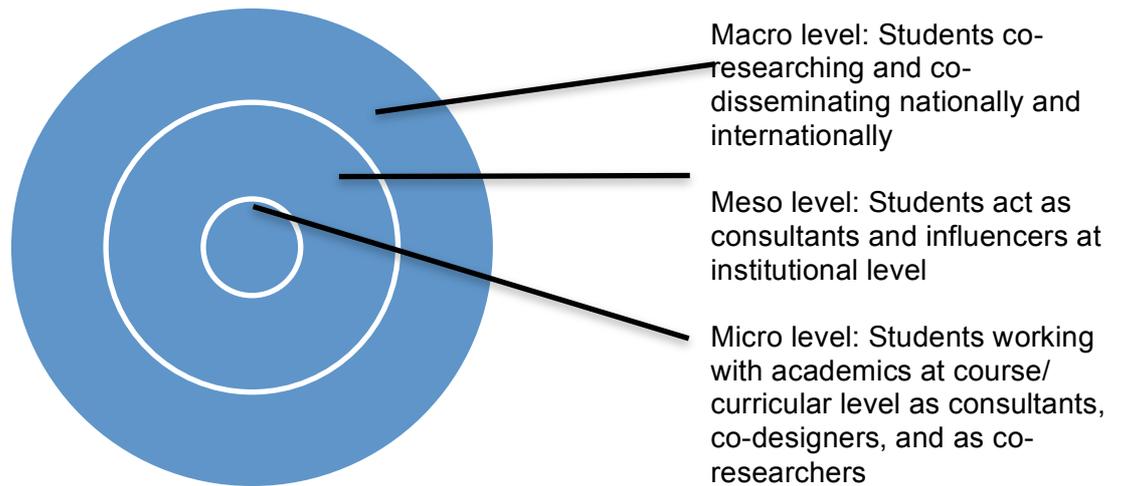
FIGURE 2 : *Student engagement with SoTL at different levels of the HE system*

7.5 Principles for student engagement

Establishing key principles that guide, underpin, and enable effective engagement practices can enable a vision of SoTL partnership among staff and students. Felten (2013:121) set out five guiding principles stating that SoTL should 1) inquire into student learning; 2) be grounded in context; 3) be methodologically sound; 4) be conducted in partnership with students; and 5) be appropriately public. Similarly, Pittaway and Moss (2013) outline four environmental principles found in their research in an Australian context, that are significant in shaping the dimensions of student engagement in SoTL:

1. Staff engagement is a prerequisite for student engagement
2. Respectful and supportive relationships are essential for learning and teaching
3. Students must be given, and actively take, responsibility for their own learning
4. Scaffolding, communicating expectations and setting high standards lead to the continued development of knowledge, understanding, skills and capacities

(Pittaway and Moss, 2013: 277)

There are a small but growing number of institutions which, through policy and strategy, are articulating, developing, and advocating for student engagement in

SoTL. Universities adopting these principles embed a partnership culture between staff and students with the intention of supporting student-led interventions. As well as working together on projects, this work is identified to support teams seeking to improve the progression and achievement of students. In a small number of institutions, students work alongside academics and professional staff on targeted educational development and enhancement projects.

7.6 The practice and ethics of student engagement in research and scholarship

There is relatively little published on the experiences of students working with academics on SoTL projects (found also by Healey *et al*., 2014a). However there are a growing number of practice-based examples that support the argument for increased efforts to engage students in SoTL activity (Bovill *et al.,* 2011; Dunne and Zanstra, 2011; Wilson *et al.,* (2013); Delphish *et al.,* 2010). Activities have been identified as effective when embedded within curricular activities that can engage students towards understanding scholarship and engaging in research through inquiry; Boyer indeed identified 'educating and enticing future scholars' (Boyer, 1990: 23) as one of the facets of the scholarship of teaching.

Integrating undergraduate research into the curriculum has the potential to provide a powerful and transformational student experience (Brew, 2010; Dunne and Owen, 2013; Healey, 2014a; Timmis and Williams, 2013; Zimbardi and Myatt, 2014). It contributes to exposing students to reflecting on complex and uncertain problems (Barnett, 1994, 1997; Brockbank and McGill, 1998). Creating opportunities for students to publish their research can generate opportunities for students to join disciplinary and interdisciplinary communities of inquiry; and develop writing and presentation skills alongside co-working with staff (Rose, 2014; Spronken-Smith *et al.,* 2013, 2014; Walkington and Jenkins, 2008).

A recent Society for Research into Higher Education (SRHE) study has identified the engagement of students in academic research and practice as a challenging agenda. The authors suggest that student involvement in enhancement activities might be a 'threshold concept' for academic staff and developers 'because it is at once counterintuitive for many academics and contradictory to norms in higher education' (Weller and Kandiko Howson, 2014: 2). Student-academics partnerships 'can be threatening, disappointing, and/or (potentially) productively unsettling' (Cook-Sather,

2013: 189) and strategies need to consider the **ethical issues** related to positions of authority and power in those partnerships. This highlights the complexity of considerations related to students engaged in scholarship (Allin, 2014; Robinson and Taylor, 2014; Weller and Kandiko Howsen, 2014). Whilst recognising that inclusivity and access to student engagement in SoTL might at first cause disruption and uncertainty, it is suggested in some areas of the literature that, with persistence, this starts to challenge and disrupt some of the established norms and leads to the promotion of authentic student integration and inclusion (Felten *et al.,* 2013: 65).

7.7   The future for student engagement in SoTL practices

There are several directions for consideration that emerge from the literature on sustaining and building staff-student partnerships in SoTL. Three that provide strategic consideration are:

- Normalisation
- Embedding
- Addressing expectations and changing roles (of students and academics)

The normalisation of student engagement practices affects not only institutions and academics, but also the changing role and expectations of students. Within the broader field of higher education literature, arguments outlining the civic and moral responsibilities of universities are presented alongside the opportunities to enable graduands to think, and act as critically informed global citizens (Shultz, 2011; Clifford and Montgomery, 2013). This literature review has begun to illustrate the potential of engagement and partnership work in developing attributes aligned to 'graduateness' and 'employability'.

Institutional efforts to embed student engagement should not be piecemeal. In other words, it should not simply be a portfolio of discrete one-off projects, or remain at the stage of 'initiatives' or 'pilots'. Instead, senior level commitment should be woven into and throughout structures and processes, policies and practices that normalise the involvement of students into everyday activity. The NUS Manifesto for Partnership provides an illustration of this approach:

> The sum total of an institution's student engagement mechanisms does not equal 'partnership', rather, 'partnership' is about investing students

> with the power to co-create, not just knowledge or learning, but the higher education institution itself.

<div align="right">(NUS, 2012: 8)</div>

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7.8 Summary

The area of student engagement is fast moving; whilst there is some consensus on areas in which student and staff partnerships might strive, the notion of SoTL partnership is still nascent and brings with it a number of challenges. The ethical considerations raised in this section in relation to the changing roles and expectations of students and academics in higher education is an important challenge. At a practical level, some work is needed to provide guidance for students and academics wishing to embark into SoTL partnership. There is also a need to further clarify the scope of student engagement as QAA and NUS definitions that focus on two loci (learning and the curriculum and the institution) may need refining, taking account of the whole HE system, and bringing in the important identity dimension

8.   Main findings and recommendations

This review has established that SoTL is a complex concept that has generated multiple definitions. It has introduced a definitional framework that identifies various **characteristics** of SoTL linked to **three different levels** of the HE system (see Figure 1). This framework has enabled us to apprehend and exploit the richness of this definition. The characteristics were tested and refined in the empirical part of the study to provide an operational framework that institutions may use to audit SoTL activities and build capacity. The final graphic representation of this framework can be found in the Executive Summary.

Examining SoTL in this way provides a vehicle to understand how SoTL operates in practice at different levels of the HE system; and to rationalise its *modus operandi* at these different levels.

8.1 Main findings from the literature review

Definition and practice of SoTL:

- There is a lack of clarity as to the status of SoTL in relation to the field of 'education'/'higher education' and pedagogic research; and a perception that SoTL work lacks 'rigour'
- SoTL is a tool that is gaining traction internationally to develop and recognize teaching competence/excellence; the prevalence of research excellence in higher education, hinders its progress as a framework to recognize teaching excellence
- The proliferation of definitions and varied conceptions of what it is may hinder its progress as a vehicle to enhance and promote teaching and points to usefulness of establishing a 'definitional framework' that allows for institutional adaptability in order to account for sector and disciplinary diversity rather than providing a new definition

New forms of SoTL:
- The literature signals a move away from the initial focus on individuals' practices to more strategic institutional and national policy foci to harness SoTL to develop competence and excellence frameworks
- SoTL work is moving towards collaborative work (including large collaborative projects); and the use of social media for dissemination

Embedding SoTL strategically for recognition:
- The literature points to the need to ensure that initiatives at the three levels of the system are aligned so that SoTL is more tightly coupled to development, excellence and promotion frameworks
- The case of SoTL career paths across the tertiary sector has been under-examined – some literature suggests linking to 'knowledge exchange' type of activities (developing mode 2 research competence)
- Disciplines and disciplinary units play a crucial role to build capacity in SoTL. It is difficult for SoTL to gain legitimacy in discipline environments, because disciplines are the guardians of conventions, and the adjudicators of what counts as knowledge. This might account for the slow progress, and the accusation of 'lack of rigour' (often attributed to educational research)

Benefits for students:

- Students can engage in SoTL and in discipline-based research with their tutors; there are important considerations to take into account to ensure this is a working relationship
- SoTL has potential to develop student global attributes

8.2 Recommendations

1. In order to address the widely recognised differences between institutions, acknowledge the importance of context in identifying teaching excellence without losing track of the need for sectorial comparability

2. In order to acknowledge the collegial/collective dimension of SoTL , promote collective engagement such as department-based evaluations of teaching; peer-review; co-authoring; student engagement; interdisciplinary work

3. Criteria for assessing SoTL should be clear and broad to counterbalance the beliefs amongst academics that only research counts towards promotion; and that research on practice is not 'rigorous'

4. SoTL should be used in the TEF as a set of qualitative indicators that represent all levels of the system (micro, meso, macro) and the variety of contexts

5. In the revised UKPSF a D0 level should be introduced to recognise the role of students engaging in SoTL

Those recommendations fed into a more detailed set of recommendations bringing together all parts of the study in the Executive Summary.

8.3 Areas for further research

This literature review has highlighted the need for further research in the following areas:

- A large-scale study addressing the issue of SoTL in private for-profit organizations. This would be particularly useful in the UK where private providers are increasingly subject to the same level of regulatory scrutiny as other institutions
- Empirical research as to whether disciplinary-based SoTL can have significant traction beyond the confines of its discipline; and in promoting trans-disciplinary knowledge
- The role of SoTL in the development of future institutional executives
- The potential link of SoTL to 'institutional research'
- The impact of HESA collection of teaching qualifications, and the resultant profiles of institutions in terms of qualified staff, on student outcomes and the student experience.

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References

ACE (2014) *Unbundling Versus Designing Faculty Roles*. Presidential Innovation Lab White Paper Series. Washington: American Council on Education.

Ahmad, A., Stockley, D. and Moore, R. (2013) 3M fellows making a mark in Canadian Higher Education. In D. Salter (ed.) *Cases on quality teaching practices in higher education*. Hershey, PA: IGI Global: 182-190.

Allin, L. (2014) Collaboration Between Staff and Students in the Scholarship of Teaching and Learning: The Potential and the Problems. *Teaching and Learning Inquiry: The ISSOTL Journal* 2 (1): 95-102.

Alvesson, M. (2002) *Understanding Organizational Culture.* London: Sage.

Alvesson, M. and Sveningsson, S. (2007) *Changing Organizational Culture: Cultural Change Work in Progress.* London: Routledge.

Ambrose, S.A., Bridges, M.W., DiPietro, M., Lovett, M.C., Norman, M.K. (2010) *How Learning Works: Seven Research-Based Principles for Smart Teaching.* New York: John Wiley and Sons.

Barnett, R. (1994) *The Limits of Competence: Knowledge, Higher Education and Society*. Buckingham: Society for Research into Higher Education and Open University Press.

Barnett, R. (1997) *Higher Education: A critical business*. Buckingham: Society For Research into Higher Education and Open University Press.

Baron, P. and Corbin, L. (2012) Student Engagement: rhetoric and reality. *Higher Education Research and Development* 31(6): 759-772.

Bartsch, R.A. (2013a) Designing SoTL Studies, Part I: Validity. *New Directions for Teaching and Learning* 136: 17-33.

Bartsch, R.A. (2013b) Designing SoTL Studies, Part II: Practicality. *New Directions for Teaching and Learning* 136: 35-48.

Bass, R. and Eynon, B. (2009) Capturing the visible evidence of invisible learning. *The academic commons for the liberal education community*. Online publication http://www.academiccommons.org/2014/10/13/capturing-the-visible-evidence-of-invisible-learning. [Accessed 5 January 2015].

Becher, T. (1989) *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines.* Buckingham: The Society for Research into Higher Education and Open University Press.

Becher, T. and Trowler, P. R. (2001) *Academic Tribes and Territories: Intellectual enquiry and the culture of disciplines.* Buckingham: Society for Research into Higher Education and Open University Press.

Bernstein, D. (2013) How SOTL-active faculty members can be cosmopolitan assets to an institution. *Teaching and Learning Inquiry* 1(1): 35-40.

Bernstein, D. (2008) Peer review and evaluation of the intellectual work of teaching. *Change: The Magazine of Higher Learning* 40 (2): 48-51.

Bexley, E., James, R. and Arkoudis, S. (2011) *The Australian academic profession in transition: Addressing the challenge of reconceptualising academic work and regenerating the academic workforce.* Melbourne: Centre for the Study of Higher Education, The University of Melbourne.

BIS (2011) Students at the Heart of the System. *Department for Business, Innovation and Skills.* Higher Education White Paper. London: HMSO.

Bloch-Shulman, S. (2011) The Socratic Method: Teaching and Writing About Philosophy's Signature Pedagogy. In N.L. Chick, A. Haynie, and R. A.R. Gurung (eds.) *Exploring More Signature Pedagogies: Approaches to Teaching Disciplinary Habits of Mind.* Sterling, VA: Stylus Publishing: 15-25.

Bloch-Shulman, S. and Cahill, A. (2012) Argumentation Step-By-Step: Learning Critical Thinking through Deliberate Practice. *Teaching Philosophy* 35 (1): 41-62.

Bossio, D., Loch, B., Schier, M., and Mazzolini, A. (2014) A roadmap for forming successful interdisciplinary education research collaborations: a reflective approach. *Higher Education Research and Development* 33 (2): 198-211.

Bovill, C., Cook-Sather, A., and Felten, P. (2011) Students as co-creators of teaching approaches, course design, and curricula: implications for academic developers. *International Journal for Academic Development* 16(2): 133-145

Boyer Commission (1998) *Reinventing Undergraduate Education: A Blueprint for America's Research Universities* (http://naples.cc.sunysb.edu/Pres/boyer.nsf/ last accessed April 2007).

Boyer, E. (1990) *Scholarship Reconsidered: Priorities of the Professoriate.* Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Boyer, E. L., Altbach, P. G. and Whitelaw, M. J. (1994) *The Academic Profession: An International Perspective.* Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching.

Brew, A. (2010) *Enhancing Undergraduate engagement through research inquiry: National teaching fellowship final report*. Sydney: Australian Learning and Teaching Council.

Brew, A. (2013) Understanding the scope of undergraduate research: a framework for curricular and pedagogical decision-making. *Higher Education* 66(5): 603-618.

Brockbank, A. and McGill, I. (1998) *Facilitating reflective learning in higher education*. Buckingham: Society for Research into Higher Education and Open University Press.

Brown, R. with Carasso, H. (2013) *Everything for Sale? The Marketisation of UK Higher Education.* London and New York: Routledge

Brownell, S. E. and Tanner, K. D. (2012) Barriers to Faculty Pedagogical Change: Lack of Training, Time, Incentives, and Tensions with Professional Identity? *CBE Life Sciences Education* 11 Winter: 339-346

Buckley, A. (2014) How radical is student engagement? (And what is it for?) *Student Engagement and Experience Journal* 3 (2): DOI 10.7190/seej.v3i2.95 http://dx.doi.org/10.7190/seej.v3i2.95 [Accessed 23rd February 2015]

Cashmore, A. and Ramsden, P. (2009) *Reward and Recognition in Higher Education: Institutional policies and their implementation*. York: Higher Education Academy.

Cashmore, A., Cane, C. and Cane, R. (2013) *Rebalancing promotion in the HE sector: is teaching excellence being rewarded?* York: Higher Education Academy.

Chalmers, D. (2011) Progress and challenges to the recognition and reward of the scholarship of teaching in higher education. Special issue: Institutional approaches to SoTL. *Higher Education Research and Development Journal* 30 (1): 25-38.

Chalmers, D., Cummings, R., Elliott, S., Stoney, S., Tucker, B., Wicking, R. and Jorre De St Jorre, T. (2013) *Australian University Teaching Criteria and Standards Project.* Sydney: Office for Learning and Teaching.

Cheng, M. (2014) Professionalizing Teaching Identity and Teaching 'Excellence' Schemes'. In L. Gornall, C. Cook, L. Daunton, J. Salisbury and B. Thomas (eds.) *Academic Working Lives: Experience, Practice and Change.* London: Bloomsbury: 162-169

Cleaver, E., Lintern, M., and McLinden, M. (2014) *Learning and Teaching in Higher Education: disciplinary approaches to educational enquiry.* London: Sage

Clifford, V. and Montgomery, C. (2014) Challenging Conceptions of Western Higher Education and promoting graduates as global citizens. *Higher Education Quarterly* 68 (1): 28-45.

Coates, H. (2006) *Student engagement in campus-based and Online Education: University connections.* Oxon: Routledge.

Collini, S. (2012) *What are Universities for?* London: Penguin.

Cook-Sather, A. (2013) Student-Faculty Partnership in explorations of Pedagogical practice: A threshold concept in academic development. *International Journal for Academic Development* 19(3): 186-198.

Cook-Sather, A., Bovill, C. and Felten, P. (2014) *Engaging Students as Partners in Learning and Teaching: A Guide for Faculty.* San Francisco: Jossey-Bass.

Copeland,R. (2014) *Beyond the consumerist agenda: Teaching quality and the 'student experience' in higher education.* London: UCU.

Coppola, B. P. and Krajcik, J. S. (2013) Discipline-Centered Post-Secondary Science Education Research: Understanding University Level Science Learning. *Journal of Research in Science Teaching* 50(6): 627-638

Cousin, G. (2008) Reconsidering scholarship reconsidered. In R. Murray (ed.) *The Scholarship of Teaching and Learning in Higher Education*. Maidenhead: McGraw-Hill Society for Research into Higher Education and Open University Press: 91-97.

Cox, M. D., & Richlin, L. (Eds.). (2011). *Building Faculty Learning Communities: New Directions for Teaching and Learning, Number 97* (Vol. 15). John Wiley & Sons.

Creanor, L. (2014) Raising the profile: an institutional case study of embedding scholarship and innovation through distributive leadership. *Innovations in Education and Teaching International* 51 (6): 573-583.

Crick, R. (2012). Deep engagement as a complex system: Identity, learning power, and authentic enquiry. In S. L. Christenson, A. L. Reschly and C. Wylie (eds.) *Handbook of research on student engagement*. New York: Springer: 675–694

Cummings, W. K. and Finkelstein, M. (2012) *Scholars in the Changing American Academy: New Contexts, New Rules and New Roles*. Dordrecht: Springer.

Cuthbert, D., Arunachalam, D., and Licina, D. (2011) 'It feels more important than other classes I have done': an authentic undergraduate research experience in in sociology. *Studies in Higher Education 37* (2): 129-142.

Delpish, A., Holmes, A, Knight-McKenna, M., Mihans, R., Darby, A., King, K., &

Felten, P. (2010). Equalizing voices: Student-faculty partnership in course design. In C. Werder and M. M. Otis. (eds.) *Engaging student voices in the study of teaching and learning*. Sterling, VA: Stylus: 96–114

Dewar, J. and Bennett, C. (2014) *Doing the Scholarship of Teaching and Learning in Mathematics*. Washington DC: Mathematical Association of America.

Donald, J. G. (2009) The Commons: Disciplinary and Interdisciplinary Encounters. In C. Kreber (ed.) *The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Boundaries.* New York and Abingdon: Routledge: 35-49.

Dunne, E. and D. Owen (2013) *The Student Engagement Handbook: Practice in Higher Education*. London: Emerald.

Dunne, E. and Zandstra, R. (2011) *Students as change agents: New ways of engaging with learning and teaching in Higher Education,* The Higher Education Academy: University of Exeter.

Eales-Reynolds, L.-J. and Frame, P. (2009) The National Teaching Fellowship Scheme in England and Northern Ireland. *Conference on Quality Teaching in Higher Education 2009*. Istanbul, Turkey: OECD/IMHE

Elton, L. (2005) Scholarship and the Research and Teaching Nexus. In R. Barnett (ed.) *Reshaping the University: New Relationships between Research, Scholarship and Teaching.* Maidenhead: Open University Press and McGraw-Hill Education: 108-118.

Fanghanel, J. (2007) Teaching excellence in context: drawing from a socio-cultural approach. In A. Skelton (ed.) *International Perspectives on Teaching Excellence in Higher Education*. Abingdon: Routledge: 197-212.

Fanghanel, J. (2009) Exploring Teaching and Learning Regimes in Higher Education Settings. In C. Kreber (ed.) *The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Bou*ndaries. London and New York: Routledge: 196-208.

Fanghanel, J. (2012) *Being an Academic*. London and New York: Routledge.

Fanghanel, J. (2013) Going public with pedagogical inquiries: SoTL as a methodology for faculty professional development. *Teaching and Learning Inquiry* 1(1): 59-70.

Fanghanel, J. and Cousin, G. (2012) A 'worldly' pedagogy: a case study on learning across conflict at university. *Teaching in Higher Education* 17 (1): 39-50.

Fanghanel, J., and Trowler, P. (2008) Exploring Academic Identities and Practices in a Competitive Enhancement Context: A UK-based case study. *European Journal of Education* 43(3): 301-313.

Felten, P. (2013) Principles of good practice in SoTL. *Teaching and Learning Inquiry* 1(1): 121-125.

Felten, P., Bagg, J., Bumbry, M., Hill, J., Hornsby, K., Pratt, M. and Weller, S. (2013) A Call for Expanding Inclusive Student Engagement in the Scholarship of Teaching and Learning. *Teaching and Learning Inquiry* 1(2): 63-74.

Gergen, K.J. (2001) *Social Construction in Context*. London: Sage.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) *The New Production of Knowledge: the dynamics of science and research in contemporary societies.* London: Sage

Glassick, C. E., Huber, M. T. and Maeroff, G. I. (1997) *Scholarship Assessed: Evaluation of the Professoriate.* San Francisco: Jossey Bass.

Greenbank, P. (2006) The academic's role: the need for a re-evaluation. *Teaching in Higher Education* 11 (1): 107-112.

Gunn, V. and Fisk, A. (2013) *Considering teaching excellence in higher education: 2007-2013.* York: Higher Education Academy.

Haigh, N., Gossman, P. and Jiao, X. (2011) Undertaking an institutional 'stock-take' of SOTL: New Zealand University case studies. *Higher Education Research and Development* 30 (1): 9-23.

HEA (2009) *Reward and recognition of teaching in higher education: a collaborative investigation: Interim Repor*t. York: Higher Education Academy.

HEA (2011) *The UK Professional Standards Framework for teaching and supporting learning in higher education*. York: Higher Education Academy.

HEA (2015) *NTFS_2015_awardsguidelines_final version.* York: Higher Education Academy.

HEA, (2013a) *Promoting teaching: Good practice benchmarks*. York: Higher Education Academy.

HEA, (2013b) *Promoting teaching: making evidence count*. York: Higher Education Academy.

HEA, (2013c) *Promoting teaching: Benchmarking guide*. York: Higher Education Academy.

Healey, M. (2000) Developing the scholarship of teaching in higher education: A discipline based approach. *Higher Education Research and Development* 19 (2): 169-189.

Healey, M. (2012) Promoting the scholarship of academic development: tensions between institutional needs and individual practices. *International Journal of Academic Development* 17(1): 1-3.

Healey, M. (2014a) Integrating Undergraduate Research into the Curriculum: International Perspectives on Capstone and Final-year Projects, *CUR Quarterly* 34(4): 26-32. Available: http://www.cur.org/download.aspx?id=3014 [Accessed 23rd February 2015]

Healey, M. (2014b) Integrating Undergraduate Research into the Curriculum: International Perspectives on Capstone and Final-year Projects, *CUR Quarterly* 34(4), 26-32

Healey, M. and Jenkins, A. (2003) Discipline-based Educational Development. In H. Eggins and R. Macdonald (eds.) *The Scholarship of Educational Development.* Buckingham: The Society for Research into Higher Education and Open University Press

Healey, M. and Jenkins, A. (2009) *Developing undergraduate research and inquiry*. York: HE Academy

Healey, M., Jenkins, A. and Hensel, N. (eds.) (2010a) International perspectives on undergraduate research and inquiry: a scholarly discussion. Posters presentations. *ISSoTL Conference 2010*, 19 October, Liverpool.

Healey, M., O'Connor K.M. and Broadfoot, P. (2010b) Reflections on engaging students in the process of learning, teaching, and assessment: an institutional case study. *International Journal for Academic Development* 15(1): 19-32.

Healey, M., Solem, M. and Pawson, E. (2010c) Introduction. In M. Healey, M. E. Pawson and M. Solem (2010) (eds.) *Active Learning and student engagement: International perspectives and practices in geography in higher education*. London: Routledge: 1-7

Healey, M., Flint, A. and Harrington, K. (2014a) Engagement through partnership: Students as partners in learning and teaching in higher education. *The Higher Education Academy.* Available: https://www.heacademy.ac.uk/engagement-through-partnership-students-partners-learning-and-teaching-higher-education [Accessed 23rd February 2015]

Healey, M., Jenkins, A. and Lea. J. (2014b) *Developing research-based curricula in college-based higher education.* York: The Higher Education Academy

HEFCE (2012) *Assessment framework and guidance on submissions*. Bristol: HEFCE.

Henard, F. and Roseveare, D. (2012) *Fostering Quality Teaching in Higher Education, Policies and Practices.* Institutional Management in Higher Education: OECD

Hensel, N. (ed) (2012*) Characteristics of Excellence in Undergraduate Research*. Washington DC: Council on Undergraduate Research. Online publication http://www.cur.org/assets/1/23/COEUR_final.pdf [Accessed 15 January 2015].

Hounsell, D. and Anderson, C. (2009) Ways of Thinking and Practicing in Biology and History: Disciplinary Aspects of Teaching and Learning Environments. In C. Kreber (ed*.) The University and its Disciplines: Teaching and learning within and beyond disciplinary boundaries.* London and New York: Routledge: 71-83.

Hubball, H., Clarke, A., and Poole, G. (2010) Ten-year reflections on mentoring SoTL research in a research-intensive university. *International Journal for Academic Development* 15(2): 117-129.

Huber, M. T. (2004) *Balancing Acts: The Scholarship of Teaching and Learning in Academic Careers*. Washington DC: American Association for Higher Education and The Carnegie Foundation for the Advancement of Teaching.

Huber, M. T. and Hutchings, P. (2005) *The Advancements of Learning: Building the teaching commons.* The Carnegie Foundation Report on the Scholarship of Teaching and Learning. San Francisco: Jossey Bass.

Huber, M. T. and Morreale, S. P. (eds.) (2002) *Disciplinary styles in the scholarship of teaching and learning: Exploring common ground.* Washington, D.C.: American Association for Higher Education.

Hugget, K., Greenberg, R., Rao, D., Richards, B., Chauvin, S., Fulton, R., Kalishman, S., Littlefield, J., Perkowski, L., Robins, L. and Simpson, D. (2012) The design and utility of institutional teaching awards: A literature review. *Medical Teacher* 34 (11): 907-919.

Hutchings, P. (1999) *The Course Portfolio: How Faculty Can Examine Their Teaching to Advance Practice and Improve Student Learning*. Washington DC: American Association for Higher Education

Hutchings, P. (2000) *Opening Lines: Approaches to the Scholarship of Teaching and Learning.* Palo Alto, CA: The Carnegie Foundation for the Advancement of Teaching.

Hutchings, P., Huber, M. T. and Ciccone, A. (2011) *Scholarship of Teaching and Learning Reconsidered: Institutional Integration and Impact.* San Francisco: Jossey-Bass.

Hutchings, P. and Huber, M. (2008) Placing Theory in the Scholarship of Teaching and Learning. *Arts and Humanities in Higher Education* 7(3): 229-244.

Hutchings, P. and Shulman, L. S. (1999) The Scholarship of Teaching: New Elaborations, New Developments. *Change: The Magazine of Higher Learning* 31(5): 10-15.

Hutchings, P., Huber, M. T. and Ciccone, A. (2011) *Scholarship of Teaching and Learning Reconsidered: Institutional Integration and Impact*. San Francisco: Jossey-Bass.

Jenkins, A. and Healey, M. (2005) *Institutional Strategies to Link Teaching and Research*. York: The Higher Education Academy.

Jenkins, A., Healey, M. and Zetter, R. (2007) *Linking teaching and research in disciplines and departments.* York: The Higher Education Academy.

John, P. and Fanghanel, J. (eds.) (2015) *Dimensions of marketisation in higher education.* New York and London: Routledge.

Kahu, E. (2013) Framing Student Engagement in higher education. *Studies in Higher Education* 38(5): 758-773.

Kanuka, Heather (2011) Keeping the Scholarship in the Scholarship of Teaching and Learning. *International Journal for the Scholarship of Teaching and Learning* 5 (1) Article 3. Available at: http://digitalcommons.georgiasouthern.edu/ij-SoTL/vol5/iss1/3

Kezar, A. and Eckel, P. D. (2002) The Effect of Institutional Culture on Change Strategies in Higher Education. *Journal of Higher Education* 73(4): 435 - 460.

Krause, K. (2005) *Understanding and promoting student engagement in University Learning Communities,* University of Melbourne: Centre for the study of Higher Education. Available: http://cshe.unimelb.edu.au/resources_teach/teaching_in_practice/docs/Stud_eng.pdf [Accessed 24th February 2015]

Kreber, C. (2002) Teaching excellence, teaching expertise, and the scholarship of teaching and learning. *Innovative Higher Education* 2 (1): 5-25.

Kreber, C. (2012) Developing the scholarship of teaching through transformative learning. *Journal of the Scholarship of Teaching and Learning* 6 (1): 88-109.

Kreber, C. (2013) The transformative potential of the scholarship of teaching. *Teaching and Learning Inquiry* 1(1): 5-18

Kreber, C. (ed.) (2009) *The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Boundaries*. New York and London: Routledge.

Kreber, C. and Cranton, P. A. (2000) Exploring the scholarship of teaching. *The Journal of Higher Education* 71(4): 476-495.

Kuh, G. D. Kinzie, J. Schuh, J.H. and Whitt, E.J. Eds. (2005) *Assessing conditions to enhance educational effectiveness: the inventory for student engagement and success.* San Francisco, CA, Jossey Bass.

Lanning, S. K., McGregor, M., Crain, G., Van Ness, C. J., Keselyak, N. T., and Killip, J. W. (2014) The Status of the Scholarship of Teaching and Learning in Dental Education. *Journal of Dental Education* 78 (10): 1353-1363

Lawson, M. A. and Lawson, H. A. (2013) New conceptual frameworks for student engagement research, policy, and practice. *Review of Educational Research* 83: 432-479.

Lea, J. (ed.) (2015) *Enhancing learning and teaching in higher education: Engaging with the dimensions of practice*. Milton Keynes: Open University Press.

Lemass, B. and Stace, R. (2010) Towards teaching and research parity. *Perspectives: Policy and Practice in Higher Education* 14 (1): 21-27

Little, S. (ed.) (2011) *Staff-Student Partnerships in Higher Education*. London: Continuum International Publishing Group.

Little, B. and Locke, W. (2011) Conceptions of excellence in teaching and learning and implications for future policy and practice'. In M. Rostan and M. Vaira (eds) . Rotterdam, The Netherlands: Sense Publishers, 119-137.

Little, B., Locke, W., Parker, J. and Richardson, J. T. E. (2007) *Excellence in Teaching and Learning: A review of the literature.* York: Higher Education Academy.

Little, B., Locke, W., Scesa, A. and Williams, R. (2009) *Report to HEFCE on student engagement. .* Bristol: Higher Education Funding Council for England .

Locke, W. (2012) The Dislocation of Teaching and Research and the Reconfiguring of Academic Work. Special issue on 'Managing higher education in the post-2012 era' *London Review of Education* 10 (3): 261–74.

Locke, W. (2014) *Shifting academic careers: implications for enhancing professionalism in teaching and supporting learning*. York : HEA .

Locke, W. and Bennion, A. (2010) *The Changing Academic Profession in the UK and beyond,* UUK Research Report. Centre for Higher Education Research and Information (CHERI).

MacDougall, M. (2012) Research-teaching linkages: Beyond the divide in undergraduate Medicine. *International Journal for the Scholarship of Teaching and Learning* 6(2) http://digitalcommons.georgiasouthern.edu/ij-SoTL/vol6/iss2/21/

Macfarlane, B. (2011) The Morphing of Academic Practice: Unbundling and the Rise of the Para-academic. *Higher Education Quarterly* 65 (1): 59-73.

Manarin, K. (2012) Reading value: Student choice in reading strategies. *Pedagogy* 12(2): 281-297.

Marcketti, S., VanDerZanden, A-M.and Leptien, J. R. (2015) SoTL Champions: Leveraging Their Lessons Learned. *International Journal for the Scholarship of Teaching and Learning* 9 (1): Article 4.

Marquis, E, Healey, M. and Vine, M. (2014) Building Capacity for the Scholarship of Teaching and Learning (SOTL) Using International Collaborative writing groups. *International Journal for the Scholarship of Teaching and Learning* 8 (1): 1-34.

Mårtensson, K. (2014) *Influencing teaching and learning microcultures: Academic development in a research-intensive university*. Doctoral dissertation. Lund: Lund University.

Mårtensson, K., Roxå, T. and Olsson, T. (2011) Developing a quality culture through the Scholarship of Teaching and Learning. *Higher Education Research and Development Journal* 3(1): 51-62.

McKinney, K. (2010) *Enhancing learning through the scholarship of teaching and learning: The challenges and joys of juggling*. San Francisco: Jossey-Bass.

McKinney, K. (ed.) (2013) *The Scholarship of Teaching and Learning in and Across the Disciplines.* Bloomington: Indiana University Press.

Singer, S. R., Nielsen N. R and Schweingruber H. A (eds.) (2012) *Committee on the Status, Contributions, and Future Directions of Discipline-Based Education Research*. Washington, DC: The National Academies Press.

NUS (2012) *A manifesto for partnership*. Available at: http://www.nusconnect.org.uk/campaigns/highereducation/partnership/a-manifesto-for-partnerships/(last accessed 17 July 2015)

Office for Learning and Teaching (2015) *Australian Awards for University Teaching Programme information and nomination instructions* Version 1.0 Updated December 2014

Parker, J. (2002) A New Disciplinarity: Communities of knowledge, learning and practice. *Teaching in Higher Education* 7(4): 373-386.

Parker, J. (2008) Comparing Research and Teaching Criteria. *Higher Education Quarterly* 62 (3): 237-251.

Parker, J. (2010) Expanding the disciplines through SoTL. In J. Fanghanel, D. Bernstein, M. Huber, D. Berthiaume, D. Warren, T. Roxa, and N. Rege Colet (eds.) *Proceedings of the 8th International Conference of the London Scholarship of Teaching and Learning*. London: University of West London: 113–119.

Pearce, N., Weller, M., Scanlon, E., and Kinsley, S. (2012) Digital scholarship considered: How new technologies could transform academic work. *Education:* 16 (1): 33-44. Available from: http://ineducation.couros.ca/index.php/ineducation/article/view/44/508

Pittaway, S. and Moss, T. (2013) Student Engagement in and Through Orientation. In Dunne, E. Owen, D. (eds) *The Student Engagement Handbook: Practice in Higher Education*. Bingley: Emerald Group Publishing: 275–290.

Pleschová, G., Simon, E., Quinlan, K.M., Murphy, J., Roxa, T., Szabó, M. (2012) *The Professionalisation of Academics as Teachers in Higher Education.* Strasbourg: Standing Committee for Social Sciences, European Science Foundation.

Poole, G. and Simmons, N. (2013) Contributions of the Scholarship of Teaching and Learning to Quality Enhancement in Canada. In R. Land and G. Gordon (eds.) *Enhancing Quality in Higher Education: International Perspectives*. London: Routledge: 118-130.

Potter, M. K., & Kustra, E. D. (2011). The relationship between scholarly teaching and SoTL: Models, distinctions, and clarifications. *International Journal for the Scholarship of Teaching and Learning*, *5*(1): Article 23.

Probert, B. (2013) *Teaching-focused academic appointments in Australian universities: recognition, specialisation, or stratification?* Office for Learning and Teaching.

Probert, B. (2014) *Why scholarship matters in higher education*? Office for Learning and Teaching Discussion Paper 2. http://oltconference2014.com.au/cms/uploads/probertscholarshipdiscussion.pdf

Quality Assurance Agency (2012) *The UK Quality Code for Higher Education*. Available: http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code [Accessed 24th February 2015]

Reeve, J. (2012) A Self-determination Theory Perspective on Student Engagement In S. L. Christenson, A. L. Reschly, and C.Wylie (eds.) *Handbook of research on student engagement*. New York: Springer: 149-172.

Rege Colet, N. and Berhiaume, D. (eds.) (2014) *La pédagogie de l'enseignement supérieur: repères théoriques et applications pratiques*. Bern, Berlin, Bruxelles, Frankfurt am Main, New York, Oxford, Wien: Peter Lang.

Rickinson, M., Spencer, R. and Stainton, C. (2012) *NTFS review 2012: Report on findings*. York: Higher Education Academy.

Robinson, C. and Taylor, C. (2014) Editorial: Ethics and student Engagement: Exploring practices in Higher Education. *Student Engagement and Experience Journal*, 3(2) Available: http://dx.doi.org/10.7190/seej.v3i2.107 [Accessed 24th February 2015].

Rose, S. (2014) Publishing undergraduate research: creating opportunities to enhance the student learning experience within a research-intensive university. *Inspiring Academic Practice* 1(2) Available: https://education.exeter.ac.uk/ojs/index.php/inspire/article/view/24 [Accessed 23rd February 2015].

Rountree, J., and Rountree, N. (2009) Issues regarding threshold concepts in computer science. *Proceedings of the Eleventh Australasian Conference on Computing Education* 95: 139-146. Darlinghurst, Australia: Australian Computer Society, Inc.

Rowlett, R.S., Blockus, L., Larson, S. (2012) *Characteristics of Excellence In Undergraduate Research* (COEUR). Washington DC: Council on Undergraduate Research.

Roxå, T. and Mårtensson, K. (2008) Strategic educational development: A national Swedish initiative to support change in higher education. *Higher Education Research and Development* 27(2): 155-168.

Roxa, T. and Martensson, K. (2009) Teaching and Learning Regimes from Within: Significant Networks as a Locus for the Social Construction of Teaching and Learning. In C. Kreber (ed.) *The University and its Disciplines: Teaching and Learning Within and Beyond Disciplinary Boundaries*. London and New York: Routledge: 209-218.

Saunders, M., Machell, J., Williams, S., Allaway, D., Spencer, A., Ashwin, P., Trowler, P., Fanghanel, J., Morgan, L. and Mckee, A. (2008) *The national formative evaluation of the 2005-2010 CETL programme: Final report*. Report to the Higher Education Funding Council for England.

Scanlon, E. (2014) Scholarship in the digital age: Open educational resources, publication and public engagement. *British Journal of Educational Technology* 45 (1): 12-23.

Shopkow, L., Diaz, A., Middendorf, J., Pace, D. (2012) The History Learning Project "Decodes" a Discipline: The Union of Research and Teaching. In K. McKinney and M. Huber Scholarship of Teaching and Learning in and across the Disciplines. Bloomington, IN: Indiana University Press: 93-113.

Shreeve, A. (2011) Joining the dots: the Scholarship of Teaching as part of institutional research. *Higher Education Research and Development* 30 (1): 63-74.

Shulman, L. S. (1999a) Course Anatomy: The Dissection and Analysis of Knowledge Through Teaching. In: Hutchings, P. (ed.) *The Course Portfolio: How Faculty*

  Can Examine Their Teaching to Advance Practice and Improve Student Learning. Washington DC: American Association for Higher Education: 5-12.

Shulman, L. S. (1999b) Knowledge and Teaching: Foundations of the New Reform. In J. Leach and B. Moon (eds.) *Learners and Pedagogy*. Milton Keynes: Open University Press: 61 - 77.

Shulman, L. S. (2004). *Teaching as community property: Essays on higher education*. San Francisco: Jossey-Bass.

Shulman, L. S. (2005) Signature Pedagogies in the Professions. *Daedalus*.134(3): 52 - 59.

Shultz, B.D. (2011) *Listening to and Learning from Students: possibilities for Teaching, Learning and Curriculum*. US: Information Age Publishing.

Skelton, A. (2005) *Understanding Teaching Excellence in Higher Education: towards a critical approach.* Abingdon: Routledge.

Skelton, A. (2007) *International Perspectives on Teaching Excellence in Higher Education: Improving knowledge and practice*. Abingdon: Routledge.

Smith, H., Deepwell, F., and Shrives, L. (2013) *Measuring the impact of the UK Professional Standards Framework for Teaching and Supporting Learning (UKPSF).* York: Higher Education Academy.

Spronken-Smith, R. Mirosa, R. and Darrou, M. (2014) 'Learning is an endless journey for anyone': undergraduate awareness, experiences and perceptions of the research culture in a research-intensive university. *Higher Education Research and Development* 33 (2): 355-371.

Spronken-Smith, R., Brodeur, J.J., Kajaks, T., Luck, M., Myatt, P., Verburgh, A., Walkington, A. and Wuetherick, B. (2013) Completing the Research Cycle: A Framework for Promoting Dissemination of Undergraduate Research and Inquiry. *Teaching and Learning Inquiry* 1(2): 105-118.

Streeting, W. and Wise, G. (2009) *Rethinking the values of higher education: consumption, partnership, community?* Bristol: QAA

Thomas, L. (2012) *Building student engagement and belonging in higher education at a time of change: final report from the 'What Works?' student retention and success programme.* London: Paul Hamlyn Foundation.

Timmis, S. E. And Williams, J. (2013) Students as co-researchers: a collaborative, community-based approach to the research and practice of technology enhanced learning (Chapter 29) In E. Dunne, and D. Owen (Eds.) *The Student Engagement Handbook, Practice in Higher Education*, London: Emerald.

Tremonte, C. M. (2011) Window Shopping: Fashioning a Scholarship of Interdisciplinary Teaching and Learning. *International Journal for the Scholarship of Teaching and Learning* 5: (1) Article 26.

Trigwell, K. (2013) Evidence of the impact of scholarship of teaching and learning purposes. *Teaching and Learning Inquiry* 1(1): 95-105.

Trigwell, K. and Shale, S. (2004) Student learning and the scholarship of university teaching. *Studies in Higher Education* 29(4): 523-536.

Trow, M. (1973) *Problems in the Transition from Elite to Mass Higher Education.* Berkeley, CA: Carnegie Commission on Higher Education.

Trowler, P. (2008) *Culture and Change in Higher Education: Theories and Practices*. Palgrave Macmillan.

Trowler, P. and Bamber, R. (2005) Compulsory Higher Education Teacher Training: Joined-up policies, institutional architectures and enhancement cultures. *International Journal for Academic Development* 10(2): 79 - 93.

Trowler, P. and Wareham, T. (2007) *Tribes, Territories, Research and Teaching: Enhancing the "Teaching-Research Nexus".* York: Higher Education Academy.

Trowler, P., Fanghanel, J. and Wareham, T. (2005) Freeing the Chi of Change: The Higher Education Academy and Enhancing Teaching and Learning in Higher Education. *Studies in Higher Education* 30(4): 427-444.

Trowler, P., Saunders, M. and Bamber, V. (eds.) (2012) *Tribes and Territories in the 21st-Century: Rethinking the significance of disciplines in higher education.* London and New York: Routledge.

Trowler, V. (2010) Student engagement literature review. *The Higher Education Academy (U.K.)* Available: http://www-new2.heacademy.ac.uk/assets/documents/studentengagment/StudentEngagementLiteratureReview.pdf [Accessed 24th February 2015].

Trowler, V. And Trowler, P. (2011) *Student Engagement Toolkit for Leaders.* Leadership Foundation for Higher Education: London. Available at :http://www.google.co.uk/url?sa=tandrct=jandq=andesrc=sandsource=webandcd=2andved=0CCgQFjABandurl=http%3A%2F%2Fwww.lfhe.ac.uk%2Fdownload.cfm%2Fdocid%2F89070556-0125-4BE3-A9B5F0FB938DD15Candei=1DPsVL-_MIXj7QaywoAQandusg=AFQjCNG9Canuw9YronAozd4Lrex63NJaewandbvm=bv.86475890,d.ZGU [Accessed 24th February 2015].

Tuomi-Gröhn, T., Engeström, Y. & Young, M. F. D. (2003) From Transfer to Boundary-Crossing Between School and Work as a Tool for Developing Vocational Education: An Introduction. In T. Tuomi-Gröhn and Y. Engström (eds.) *Between School and Work: New Perspectives on Boundary-crossing.* Oxford: Pergamon: 1-15.

Walkington, H. and Jenkins, A. (2008) *Embedding Undergraduate Research Publication in the Student Learning Experience*, Oxford Brookes University. Available: http://bejlt.brookes.ac.uk/paper/embedding_undergraduate_research_publication_in_the_student_learning_experi-2/ [Accessed 24th February 2015].

Webb, A. S., Wong, T. J., and Hubball, H. T. (2013) Professional Development for Adjunct Teaching Faculty in a Research-Intensive University: Engagement in Scholarly Approaches to Teaching and Learning. *International Journal of Teaching and Learning in Higher Education* 25 (2): 231-238.

Weller, S. and Kandiko Howson, C. (2014) *Society for Research into Higher Education Research Scoping Study Award: Final Report May 2014*. Students as co-developers of Learning and teaching: Redefining expertise and student voice through student participation in professional development. University of the Arts and Kings College London.

Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity.* Cambridge: Cambridge University Press.

Wenger, E. (2010) Communities of practice and social learning systems: The career of a concept. In C. Blackmore *Social learning systems and communities of practice*. London: Springer: 179-198.

Wenger-Trayner, E., Fenton-O'creevy, M., Hutchinson, S., Kubiak, C. and Wenger-Trayner, B. (2014) *Learning in Landscapes of Practice: Boundaries, identity, and knowledgeability in practice-based learning* London and New York: Routledge.

Wheelahan, L., Moodie, G., Billett, S. and Kelly, A. (2009) *Higher education in TAFE*. Adelaide: NCVER.

Wheelahan, L., Arkoudis, S., Moodie, G., Fredman, N. and Bexley, E. (2012) *Shaken not stirred? The development of one tertiary education sector in Australia.* Adelaide: NCVER

Wilsdon, J. *et al.* (2015). The Metric Tide: Report of the Independent Review of the Role of Metrics in Research Assessment and Management. DOI: 10.13140/RG.2.1.4929.1363

Williams, A. L., Verwood, R., Beery, T.A., Dalton, H., McKinnon, J., Strickland, K., Pace, J. and Poole, G. (2013a) The Power of Social Networks: A Model for Weaving the Scholarship of Teaching and Learning into Institutional Culture *Teaching and Learning Inquiry* 1 (2): 49-62

Williams, M., Goulding, F. and Seddon, T. (2013b) *Towards a culture of scholarly practice in mixed-sector institutions.* Adelaide: NCVER.

Wilson, A., Howitt, S., Roberts, P., Åkerlind, G and Wilson, K. (2013) Connecting expectations and experiences of students in a research-immersive degree. Studies in Higher Education 38 (10): 1562-1576.

Wright, M. C., Finelli, C., Meizlish, D. and Bergom, I. (2011) Facilitating the Scholarship of Teaching and Learning at a Research University. *Change: the Magazine of Higher Learning.* April 2011: 50-56.

Zimbardi, K. and Myatt, P. (2014) Embedding undergraduate research experiences within the curriculum: a cross-disciplinary study of the key characteristics guiding implementation. *Studies in Higher Education* 39(2): 233-250.