Barriers and Benefits of using the Scholarship of Teaching and Learning (SoTL) within a Widening Participation (WP) UK Sports Therapy Undergraduate Programme

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ISSOTL

Working in the Scholarship of Teaching and Learning (SoTL) can be lonely. I would like to thank my extended family within the International Society for the Scholarship of Teaching and Learning for providing guidance and focus and enabling me to talk openly and honestly about the work I do and how best to narrate the journey that has formed the golden threads within the thesis.

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Abstract

This thesis explores the barriers and benefits of, identifying with and using the *Scholarship of Teaching and Learning (SoTL)* to design a learner-centred UK undergraduate (UG) sport therapy curriculum (STC) at a widening participation (WP) United Kingdom (UK) university. Little research explores how SoTL is used to design and develop a sports therapy programme. This thesis propounds SoTL as an instrumental framework for enacting transformative pedagogical changes within a WP curriculum. It presents a connected SoTL narrative, encapsulated in six publications, through which I articulate an evolving understanding of SoTL and its intricate application to STC design. This research augments the current SoTL discourse by critically challenging normative assumptions and interrogating prevailing SoTL definitions and analyses as a threshold concept. I argue that the contribution this thesis makes to knowledge is evident in multiple ways. First, the publications challenge assumptions about disciplinary disparities in SoTL, emphasising the interdisciplinary nature of SoTL practice and its impact on professional development (publication one, three and six). Second, theory is applied (Lieff *et al.,* 2012) in new ways, identifying SoTL as a threshold concept, disrupting traditional teaching views (publication two). Third, publication three advances SoTL understanding by exploring review processes, biases and diverse outputs, challenging traditional publication conventions. Finally, publications four, five and six argue for transforming student support through peer mentoring, holistic and lifelong learning (LLL) and online learning applications for enhancing feedback for learning unique to WP environments. This work's significance transcends its immediate application, resonating with the imperative to recalibrate pedagogical praxes within a dynamic and evolving HE landscape. The thesis concludes by delineating future work through three interconnected themes: First, identity and SoTL leadership; second, mentoring and compassion; and third, holistic lifelong learning (LLL) education, preparing students for real-world application of skill sets and positively impacting the student learning experience.

Keywords: Scholarship of Teaching and Learning (SoTL), Widening Participation (WP), Lifelong Learning (LLL), Peer Mentoring (PM), Learner-Centred Pedagogy

Contents

Glossary of Terms

AM	Academic Misconduct
BAME	Black Asian Minority Ethnic
FHEA	Further and Higher Education Act
GC	Grand Challenges
HE	Higher Education
HEIs	Higher Education Institutions
ICWG	International Collaborative Writing Groups
ISSOTL	International Society for the Scholarship of Teaching and Learning
LLL	Lifelong Learning
NTF	National Teaching Fellowship
OfS	Office for Students
PM	Peer Mentoring
PSF	Professional Standards Framework
QAA	Quality Assurance Agency
REF	Research Excellence Framework
SDG	Sustainable Development Goal/s
SA	South Africa/n
SMILES	Sports Mentoring Inclusive Learning Experience Scheme
SoTL	Scholarship of Teaching and Learning
STC	Sport Therapy Curriculum
TEF	Teaching Excellence Framework
TK	Troublesome Knowledge
TLI	Teaching and Learning Inquiry
UEL	University of East London
UK	United Kingdom
UN	United Nations
WP	Widening Participation

Thesis Notes: The term *learner-centred* is used purposefully to denote pedagogies focussed on creating an environment that encourages students to deeply engage with the learning material, develop a dialogue and reflect on their progress. Learner-centred teaching is rooted in a constructivist framework of learning theory by positioning the learner within the learning environment. Within the literature, *learner-centred* and *student-centred* are often used interchangeably. This thesis uses SoTL as a key thread to connect the six publications. As a guiding SoTL principle, inquiry into learning better aligns with learner-centred pedagogies.

The term ***BAME*** is used only as a reporting term related to the writing of publication five. It is acknowledged that the term was abandoned in 2021.

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1. Introduction

The research submitted here for the award of a PhD by publications is carefully selected from a larger body of research. I track the significance of identifying with and using the Scholarship of Teaching and Learning (SoTL) to design a learner centred undergraduate (UG) sport therapy curriculum (STC) in a widening participation (WP) United Kingdom (UK) university. This thesis takes the form of a critical appraisal of six peer-reviewed articles published between 2013 and 2022 (see Figure 2, Appendix 1). Whilst SoTL is the main thread guiding the thesis narrative, it also includes several parallel sub-threads, such as, WP*, peer mentoring (PM) and lifelong learning (LLL)* (see Figure 1, Appendix 1). Through these publications, I address two fundamental research questions:

1. What are the barriers and benefits of identifying with and practising SoTL?
2. How does using a SoTL framework to design the UG STC within a WP UK university affect the student learning experience?

The thesis includes a literature review that addresses challenges and opportunities identified in the publications, focussing on the relationships between content, socio-cultural context (WP) and teaching, learning and assessment as integral to curriculum design (see Figure 3).

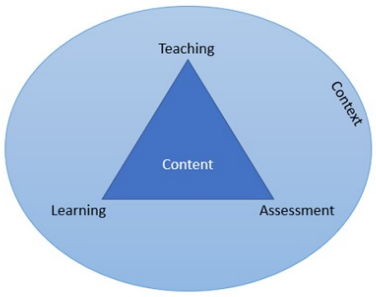


Figure 3: The Interrelated Complexity of Pedagogy (Lynch and Norley, 2023)

First, I begin by providing an overview of my philosophy of teaching and learning by connecting my personal with my pedagogical philosophies and then consider my ethos of collaboration and collaborative authorship. Second, I explain my individual contribution to knowledge within each of the publications. Third, I discuss the interconnections between teaching and learning. Fourth, I position my publications within a WP context. Finally, I explore SoTL principles

and practice as a framework for designing the components of a learner-centred STC at the University of East London (UEL), a WP Higher Education Institution (HEI).

I define SoTL as

> *systematic inquiry into student learning, using a range of methodologies and the sharing of findings through appropriate public activities*.

This definition has been informed by my lived (***actively engaging in SoTL***), learned (***working collaboratively to assess what works***) and led (***leading SoTL projects and initiatives***) SoTL experiences. It reflects an instructional approach to education and focusses primarily on Boyer's (1990) scholarships of application (as applied research) and teaching (as pedagogical learning and research) (see Figure 4 below). Thus, my practice approach to SoTL has a micro-focus on specific classroom activities, reflecting more scholarly SoTL practice (inquiry into what works within the context I teach) rather than broader pedagogical research (Tight, 2017). Further, it includes Kreber and Cranton's (2000) recognition that academics need to conduct teaching and learning research in their own disciplines and Felten's (2013) assertion that 'good practice in SoTL requires focussed, critical inquiry into a well-defined aspect of student learning' (p. 122). I view reflection as essential to SoTL, aligning with Kreber's (2013) view that SoTL often refers to reflective practitioners. This is suitably captured in Abrahamson (2022), which considers how reflection is used within the review process for SoTL publications.

1.1 Personal Philosophy

Growing up in South Africa (SA) during the peak of apartheid, I witnessed the stark divisions among people based on class, culture, colour and creed. Attending a white-only school ironically shielded me from the unfolding social inequalities in the country. Despite this insulation, my parents consistently encouraged me to question civil rights and social justice issues. As I progressed through HE and engaged with a more diverse student cohort, my curiosity in socio-cultural justice deepened. Navigating my own privilege and reflecting on my lived experiences, I

actively committed to fostering student belonging and easing transitions into varied learning environments. Simultaneously, I noticed that the SA HE system in the early 1990s primarily focussed on instructing and categorising students rather than empowering student voice and success as elucidated by Vailes (2017).

When I began my HE journey, first as a student and later as a teacher, I made a deliberate choice to focus on positioning students at the centre of the learning experience. This decision led me to advocate fervently for WP by constructing inclusive communities of shared practice, drawing from my lived and learned experiences. This advocacy both prompted me to pose alternative questions about success strategies and foregrounded the invaluable role of communities of shared practice in co-creating learner-centred experiences, addressing not only diverse academic backgrounds but also enriching the educational landscape.

1.2 Pedagogic Philosophy

My pedagogic philosophy places equality of opportunity, WP and diversity at the heart of teaching, both within and beyond the formal classroom. These principles and experiences found a focus in my own disciplinary scholarship, with the most enduring influence coming from how students flourish and, particularly, Vailes's (2017) dynamic work on strategies to support students from diverse backgrounds in and through their educational experiences using learner-centred approaches. This stimulated me to discover more about what works in different contexts, why it works and how to create communities of inclusive practice. This ontological search to improve and transform my teaching practice stimulated my interest in SoTL by using a student-as-partner framework to challenge convention and discover 'visions of the possible' (Hutchings and Schulman, 1999).

Equally significant for both my personal and pedagogic growth is the recognition I have received at the institutional (professorial), national and international levels for SoTL teaching excellence and leadership in which I purposefully involve students as partners in collaboratively developing their undergraduate learning experience. I achieve this by using active, participatory and inclusive learner-centred pedagogy whilst enabling students to contribute

significantly to their own learning and that of their classmates. My leadership in SoTL has enabled me to connect different communities of practice through shared interests and goals.

1.3 Collaboration

At the heart of my academic identity lies a fundamental belief in the richness of collaboration. This stems from my personal philosophy. Witnessing the limitations imposed by division, I gravitated towards fostering inclusive learning spaces where knowledge is co-created. This translates directly into my writing philosophy, where collaborative authorship is not just a method, but an ethos. I find myself as a facilitator, guiding and supporting others to flourish (Vailes, 2017) within the collaborative process. This involves fostering a climate of trust and open communication, where every voice is valued and heard. By nurturing each collaborator's strengths and expertise, I help them navigate the writing journey with confidence.

Writing partnerships (Felten, 2013) serve as a cornerstone of this philosophy. Collaborative authorship dismantles traditional hierarchies, placing all collaborators as active partners in the writing process. Their unique perspectives and lived experiences enrich the final product, going beyond simply absorbing my expertise. This collaborative approach becomes a vibrant dialogue where we challenge and refine each other's ideas, culminating in more robust and impactful work.

Collaboration, in my view, is not merely about inclusivity but about harnessing the collective wisdom of all participants. By combining diverse perspectives and experiences, collaborative authorship leads to a richer understanding, particularly when tackling complex issues like educational equity. This shared creation fosters a more collegial and comprehensive exploration of such topics, ultimately leading to a stronger contribution to the academic literature.

1.4 SoTL as Counterpoint to Neoliberalism

Learner-centred approaches (further expanded under 2.5 Learner-Centred Pedagogies below) can be rigid and constrained within the current UK educational system (Kinman and Jones, 2003). Specifically, several barriers to implementing individualised learning experiences remain, such as, but not limited to, learner and staff diversity, staff workload and individual support and guidance (Thomas, 2010). Diversity is complex as it relates to woven dimensions of education, disposition, circumstance and culture. Each level is inextricably connected to student identity, yet combined, create a multifaceted web of covert individuality (Thomas, 2010, Scharff et al., 2023). This set of contexts does not simply exist at an individual or institutional level; it is far wider spread.

UK HE tends to overlook intersectionality, mistakenly presuming homogeneity within demographic groups. An inclination to problematise diversity compounds this oversight, aligning with identified neoliberal agendas (Smith, 2017). Notably, the HE sector predominantly revolves around addressing gaps and measuring differences rather than acknowledging individuality. Neoliberalism can be defined as the reappearance of 19th-century ideas associated with free-market capitalism in the late 20th century (Cannella and Koro-Ljungberg, 2017; Thomas, 2010) and is characterised by its emphasis on market principles, deregulation and individual responsibility. This ideology prioritises efficiency, productivity and quantifiable outcomes, leading to a culture of performativity and metrics-driven approaches to teaching and learning. Within this context, SoTL emerges as a potential counterpoint, offering a more holistic and humanistic vision for pedagogy.

The influence of neoliberalism on HE manifests in several ways. Increased emphasis is placed on teaching students as customers and universities as businesses competing for students and funding. This leads to a focus on measurable outcomes and standardised curricula, often at the expense of critical thinking and intellectual exploration.

SoTL stands in stark contrast to this neoliberal agenda. At its core, SoTL promotes a commitment to student learning that extends beyond quantifiable metrics (Bernstein, 2013). It encourages educators to critically reflect on their

teaching practices, experiment with innovative pedagogies and collaborate with colleagues to share best practices. This focus on continuous improvement and reflective practice fosters a deeper understanding of the complexities of teaching and learning (Scharff et al., 2023).

While SoTL offers a compelling counterpoint to neoliberalism, it also faces challenges. The current emphasis on metrics and performativity can create an environment where SoTL activities are seen as burdensome or irrelevant. Additionally, securing time and resources for SoTL scholarship can be difficult within a culture focused on teaching loads and research productivity.

By demonstrating the positive impact of SoTL on student learning outcomes and aligning SoTL practices with institutional goals, academics can advocate for the value of SoTL within their institutions (Bernstein, 2013). Additionally, the growing interest in student experience and graduate employability creates space for SoTL to contribute to these goals.

Thomas's research (2010) underscores the significance of incorporating belonging, identity and success into the curriculum-design process. Thomas's findings underline that a meaningful curriculum needs to recognise the multifaceted nature of student identities and experiences, challenging the prevalent trend to oversimplify diversity issues. By incorporating these elements, the curriculum can transcend the limitations of a standardised approach, fostering a more inclusive and nuanced educational environment that reflects the rich diversity of the student body (Kinman and Jones, 2003; Fowler, 2005).

1.5 Contribution to Knowledge

My research has made significant contributions to the understanding of SoTL identity and its impact on teaching practice. The overall contributions to knowledge are suitably documented in Appendix 3. Below I evidence my distinct contribution to knowledge within each of the publications in specific ways:

Publication 1: Integrating Disparate Literature

My central contribution lies in the integration of previously disparate literature areas by exploring SoTL as a threshold concept and connecting academic

identity with SoTL identity, thereby offering solidarity to scholars entering the field.

Publication 2: SoTL as Troublesome Knowledge

Here, I argue for a novel conceptualisation of SoTL as a troublesome knowledge concept (Perkins, 1999). Building on Lieff *et al.* (2012) I extend this framework to explore SoTL identity in relation to its personal, relational and contextual dimensions, thereby positioning SoTL identity in three domains.

Publication 3: Supporting New SoTL Authors

My key contribution lies in using my vast experience as a reviewer to disrupt publication formats in order to support and encourage more diverse and inclusive SoTL practices.

Publication 4: Repositioning Student Feedback Tools

My contribution lies in demonstrating how technology, such as Turnitin, can be utilised beyond its original purpose, leading to a more balanced and supportive approach to feedback practices. I led the repurposing of Turnitin software as a pedagogic tool to support learning. The impact of my contribution led to consultancy opportunities with the software developers, influencing the way feedback tools are designed and used.

Publication 5: Addressing a Gap in Mentoring Research

My contribution lies in providing valuable insights into a previously neglected perspective within the SoTL mentorship landscape. I led the study, focussing on mentors' experiences within mentoring and, based on the results, offered recommendations for designing and developing peer mentoring projects in WP HE settings and further advancing the literature on SoTL and mentorship.

Publication 6: Innovative SoTL Model

My contribution lies in developing this T-shaped conceptual framework by connecting the work of Guest (1991) to SoTL and accounting for the dynamic changes within the HE landscape, underscoring the crucial role SoTL plays in supporting LLL. I led the study design and focus by attending strategically to lacuna in SoTL research around LLL.

This thesis expands the understanding of SoTL beyond its traditional focus on scholarly teaching (Kern et al., 2015) by incorporating personal, disciplinary and developmental contexts. This contextual framework, detailed in Table 2 (Appendix 3), reflects the connections between my lived experiences as an educator, ongoing learning through research and leadership in shaping SoTL practices.

2. Literature Review

2.1 Higher Education Teaching and Learning

> "A commitment to sharing power within the learning and teaching context involves more than simply moving from a teacher-focus to a student-focus, but instead a full re-examination of the inter-relationships of both roles".
>
> Huxham *et al.* (2015, p.533)

How to maximise learning to ensure student success in higher education (HE) has been a concern for the past 20 years (Huxham *et al.,* 2015). More recently, the complexity of student learning was foregrounded in the International Society for the Scholarship of Teaching and Learning (ISSOTL) grand challenges (GC) (Scharff *et al.,* 2023). Accordingly, learning is a GC due to its multifaceted nature, encompassing diverse domains, individual differences, incomplete understanding, limited prioritisation and technological complexities, necessitating comprehensive research and resources. Post '92 universities, typically, a former polytechnic or central institution that was given university status through the Further and Higher Education Act (FHEA) (1992), face unique challenges in ensuring students from diverse academic and socio-economic backgrounds pass assessments and gain necessary skills and knowledge to support their future successes (Kember, 2009; Barnett, 2014).

In sports therapy education, the curriculum is often guided by an external professional body who determine both the content and its sequence in ensuring students satisfy several professional competencies aligned with broad learning outcomes. To meet them, many sports therapy educators opt to focus on content delivery at the expense of methods for effective student learning by controlling topics, assessments and learning activities as emphasised by Shulman (1986). In contrast, the Quality Assurance Agency (QAA) benchmark statement across

a range of disciplines (including sports therapy) encourages students to become curriculum co-creators, having both active voice and serving as educational change agents (section 4.2, 2019). The focus on ***having to*** learn specific content as opposed to investigating ***effective methods for learning*** the content (Naidoo and Williams, 2015) and fostering a culture for lifelong learning (LLL) as outlined in publication six (Eady *et al.,* 2021) may lead to disengagement from the learning activities as opposed to connecting with the subject content through deeper learning methods (Huxham, 2015).

This thesis challenges the focus of ***having to learn,*** first by aligning the subject content and student needs with SoTL principles of (Felten, 2013), then considering effective student learning through a range of interventions and strategies, such as PM and LLL, within a WP learning environment.

2.2 The WP Context

Government WP policies shape the student experience through institutional mediation. WP is predicated on the notion that some social groups have been under-represented in HE (Milburn, 2012). Whilst patterns of participation in HE have increased substantially over the past half century in the UK and certainly since the Crossman and the Robins report of the early 1960s and the creation of ‘plate glass’ universities, young people from the most socially disadvantaged backgrounds and groups remain significantly less likely to enter HE (Boliver, 2013; Chowdry *et al.,* 2013). As such, the implied notion of ‘fair access’ has been extended to embrace a concern over entry patterns to different types of HEIs, such as those from protected characteristics.

These issues are amplified in UEL UG sports students. Many students are drawn to sport science courses based on their physical ability and talent in sport, thereby expecting a higher percentage of physical sport programme participation. Boliver (2013) argues that this assumption of physical weighting of sport in the degree programme has the potential to impact negatively on student engagement when students recognise the reality of the learning experience and balance between theory and practice, as foregrounded in the ISSOTL GCs (Scharff *et al.,* 2023). Staff grapple with the dual challenge of designing a professional curriculum that innovatively envisions methods to bolster student

expectations, transitions and overall success within the programme. Whilst WP settings are challenging, they equally provide opportunity to develop innovative projects to connect teacher with learner through facilitated learning experiences. This is evident in publication five around employing a SoTL framework in specific contexts and using Felten's (2013) principle of 'in partnership with students' to co-create a PM support programme by examining the relationships between teacher and learner.

2.3 Teacher-Learner Connections

Kember (2009) highlighted two studies (Kember *et al.,* 2002; Trigwell *et al.,* 1994) that displayed an association between teachers' approaches to teaching and their beliefs about teaching, thereby connecting teaching philosophies with teaching and learning practices. Earlier, Dall 'Alba (1991) identified seven ways in which teachers conceived their teaching, ranging from presenting information to conceptual change, an idea evident in the later work of Prosser and Trigwell (2006), who identified dichotomous approaches to teaching they labelled 'information transfer/teacher focused' (ITTF) and 'conceptual change/student focused' (CCSF). Moreover, Samuelowicz and Bain (2001) identified seven teachers' conceptions of teaching: imparting information; transmitting structured knowledge; providing and facilitating understanding; helping students develop expertise; preventing misunderstandings; negotiating meaning; and encouraging knowledge creation. Samuelowicz and Bain (2001) emphasised how these reflected two orientations to teaching and learning. The first is teacher-centred, the second learner-centred. These differing orientations influence teachers' view about the nature of understanding and learning and their role in knowledge organisation. The burgeoning research conducted in the field of teaching and learning reiterates this very point (Mishbah *et.al.,* 2022).

Analysis reveals a clear, qualitative learning divide where the transmission and accumulation of 'facts', 'figures' and 'knowledge' is both recognised and rewarded. This, ironically, is often how many sports therapy UG students are educated (McCullogh *et al.,* 2022). HE curricula have recently undergone significant change, increasing demands for institutions to more effectively deliver tuition which prepares graduates for the real world, particularly,

employment (Eady *et al.,* 2021; Brooman *et al.,* 2015). Variation in curricula decision-making from country to country and institution to institution compound the challenge. Some curricula are decided by the state, whereas others are directed by external regulators and professional bodies (Grant, 2018). Moreover, as student numbers and teaching workloads increase, academics face rising pressure to provide more engaging student-focussed education (Dredge and Schott, 2016).

This thesis responds to this dichotomy by using SoTL to focus more on qualitative teaching and learning experiences. In so doing, it positions the learner central to the learning environment and argues for co-creating the learning experience. It challenges the assumption that the teacher controls the knowledge and illustrates the value of student contribution through active learning engagement. The teacher is viewed more in a 'facilitating' role than as an 'authority' figure and works to establish a community of shared practice (Barnett, 2014).

Within the publications, I advocate for creating communities of practice (Lave and Wenger, 1991) that promote belonging and inclusion through PM, collaborative sharing of ideas and weaving together an understanding of what matters most in WP LLL experiences (Eady *et al.,* 2021; Abrahamson and Mann, 2018; Abrahamson *et al.,* 2019). This is significant in my included publications, and, more so, in the genesis of the published work as collaborative creations. Whilst approaches to teaching and learning may be construed as individualistic (Schulman, 2005), it is necessary to recognise the influence of this type of approach to teaching.

2.4 Teacher's Influence on Learning

The existing discourse undeniably highlights the considerable influence teachers wield in educational settings (Hennessey, 2013). However, Knewstubb and Bond (2009) underscored the inherent variability in content delivery, introducing challenges in providing consistent learning objectives (Marton *et al.,* 2004). Brookfield (2006) insists on educators scrutinising how their assumptions shape practice through four lenses: students' perspectives, colleagues' perceptions, literature and personal experiences. Boyer (1990) emphasises that faculty, as

scholars, are perpetual learners, yet Brookfield urges a critical examination of our autobiographies as learners, revealing both the pleasures and terrors our students confront, foregrounding the underlying deficits in understanding these complexities.

Teachers' pedagogic practices serve as a foundational model shaping students' perceptions of subject knowledge (Conley *et al.,* 2004; Hofer, 2001), significantly impacting student learning outcomes (Hofer, 2001; Akcay and Yager, 2010). HE research primarily examines students' learning approaches across various contexts, recognising the student- and context-dependent nature of adopted approaches (Baeten *et al.,* 2013; Baeten *et al.,* 2010; Biggs, 2001). This accentuates the dynamic nature of students' learning strategies, influenced by both contextual factors and individual interpretations. This is confirmed by Felten (2013), who asserts that SoTL practice needs to be grounded in context and in partnership with students, thereby positioning students central to SoTL inquiry.

2.5 Learner-centred Pedagogy

As indicated above, the context in which I work is crucial for considering and designing the learning experiences of the individual learners. This philosophical position is seated within a humanistic constructivist theory, valuing the individual's voice, identity and ways of being. Constructivist pedagogy sees the learner as unique, the teacher as facilitator and learning as a socially constructed process (Webber, 2012). New information is linked to prior knowledge, and subjective representations of reality are created. Past experiences and cultural factors influence learning. Furthermore, constructivist pedagogy sees the educator as designing a learning experience that positions both knowledge and feeling at the centre of the experience. The creation of a nonthreatening and inclusive learning experience enables the educator to recognise the influence of teaching on learning to enable student success (Webber, 2012). Felten (2013) elucidated that good SoTL practice captures meaningful inquiry into learning grounded in context and partnership with students. A learner-centred philosophy embraces Felten's (2013) ideas and provides insight into understanding student as partners.

Learner-centred learning and teaching in HE refers to the ways in which pedagogy, curricula and assessment are designed to engage students in meaningful, relevant learning that supports life skills and is accessible to all (Abrahamson and Mann 2018; Hockings, 2011). It embraces a view of the individual and individual difference as the source of diversity that can enrich the lives, philosophies and learning of others. Learner-centred approaches can be rigid and constrained within the current UK educational system (Kinman and Jones, 2003). Specifically, several barriers to implementing individualised learning experiences remain, such as, but not limited to, learner and staff diversity, staff workload and individual support and guidance (Thomas, 2010). Diversity is complex as it relates to woven dimensions of education, disposition, circumstance and culture. Each level is inextricably connected to student identity, yet combined, create a multifaceted web of covert individuality (Thomas, 2010, Scharff *et al.,* 2023). This set of contexts does not simply exist at an individual or institutional level; it is far wider spread. UK HE tends to overlook intersectionality, mistakenly presuming homogeneity within demographic groups. An inclination to problematise diversity compounds this oversight, aligning with identified neoliberal agendas (Smith, 2017). Notably, the sector predominantly revolves around addressing gaps and measuring differences rather than acknowledging individuality. Thomas's research (2010) underscores the significance of incorporating belonging, identity and success into the curriculum-design process. Thomas's findings underline that a meaningful curriculum needs to recognise the multifaceted nature of student identities and experiences, challenging the prevalent trend to oversimplify diversity issues. By incorporating these elements, the curriculum can transcend the limitations of a standardised approach, fostering a more inclusive and nuanced educational environment that reflects the rich diversity of the student body (Kinman and Jones, 2003; Fowler, 2005).

This thesis critically engages with the challenges inherent in WP, student transition, participation and success within a UK university context. It goes beyond merely highlighting these challenges, using SoTL as a transformative framework. Distinctively, the thesis directs attention towards the practical applications of SoTL within the UG STC. By doing so, it addresses the existing gaps in the literature

while contributing a unique perspective on the application of SoTL within the specific context of a STC. The thesis seeks to add to the academic discourse, providing actionable insights for educators, administrators and policymakers. By offering tangible solutions grounded in empirical research and scholarly inquiry, it aims to contribute meaningfully to the ongoing efforts to enhance the quality and inclusivity of the student learning experience.

2.6 The Scholarship of Teaching and Learning (SoTL)

Modern SoTL frameworks and practices can be traced back to Boyer's (1990) 'Scholarship Reconsidered: Priorities of the Professoriate', which laid the foundations for SoTL development (see Figure 4 below).

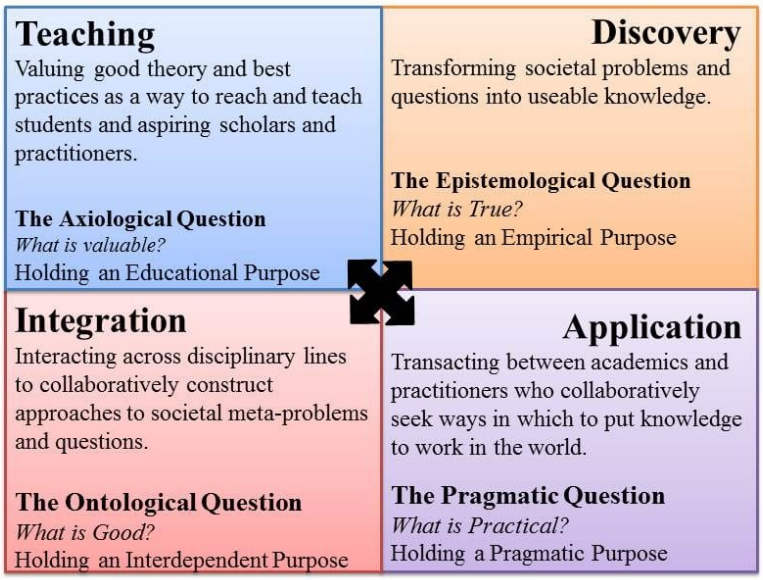


Figure 4: Boyer's (1990) Model of Scholarship

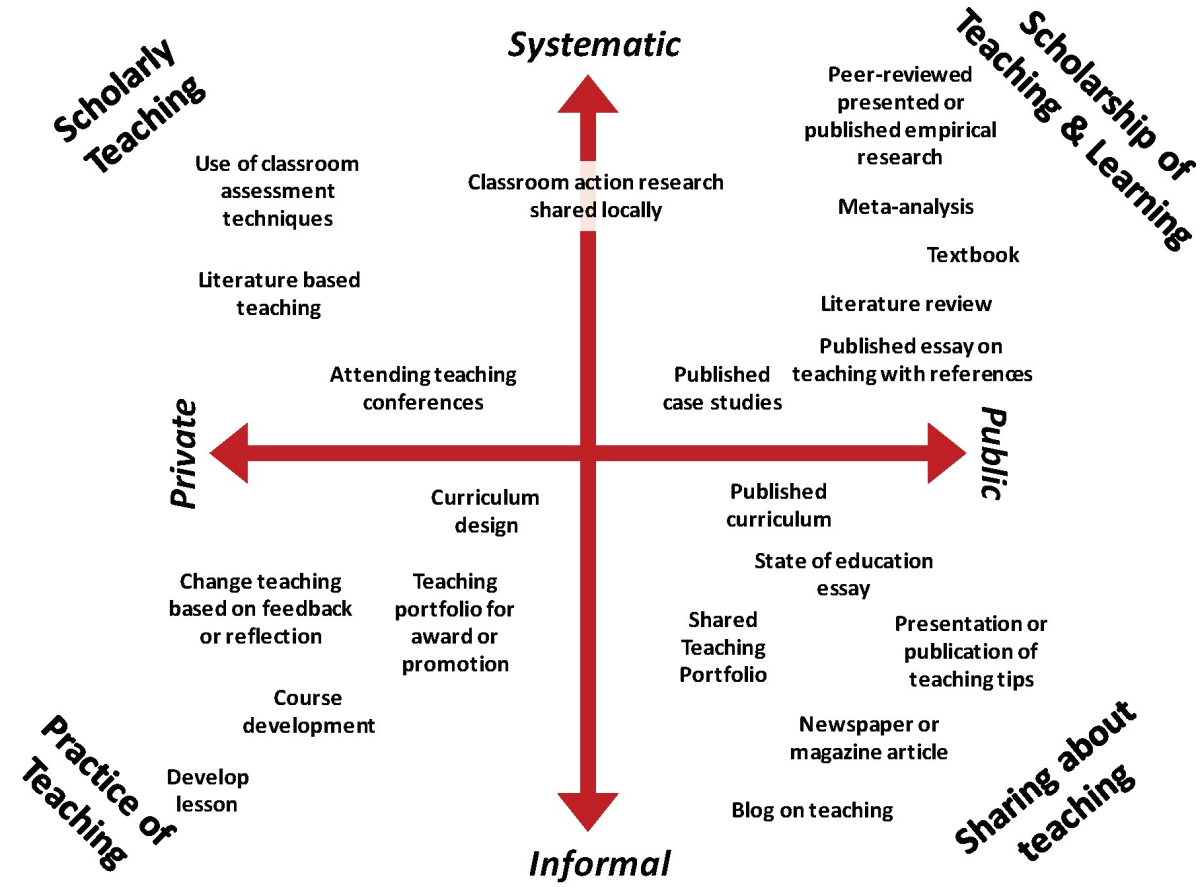
SoTL foregrounds research into teaching and learning and re-designates HE teaching as a developmental activity requiring purposeful experimentation, investigation and exploration. Bass (2020) postulated that SoTL's value lies in not simply fixing pedagogical issues but researching how, why and when they occur. SoTL aims to foster significant, long-lasting learning for all students (Eady *et al.,* 2021) and to advance the practice and profession of HE teaching. Nonetheless, critique of Boyer's work emerged, relating, *inter alia,* to a lack of

conceptual progress (Tight, 2017); a failure to fully address HE's socio-economic context (Davis and Chandler, 1998); and conceptual confusion around Boyer's definitions and SoTL's state and status (Boshier, 2009).

Kinchin *et al.*'s (2008, p. 89) concerns resonated with Boshier's (2009) views, critiquing why universities are 'centres of non-learning', considering that, for educators to engage properly in SoTL, they would need to 'first consult discipline-specific literature on teaching and learning, second focus reflection on specific areas on one's practice, third focus teaching on students and learning and fourth publish results of teaching initiatives through peer review mechanisms' (p. 92). The six publications in this thesis achieve this by connecting a cohesive narrative that engages in a critical analysis of the challenges associated with implementing SoTL in a UK WP HE setting, offering substantial insights and knowledge, thereby presenting a vivid depiction of the complexities involved in applying SoTL within this particular context. In doing so, the thesis becomes a pivotal contribution to the discourse on effective teaching and learning practices with a commitment to WP.

SoTL has developed many more strands and intellectual approaches since Boyer's original conception with its four basic scholarships of discovery, integration, application and teaching. I appreciate that SoTL is a broad church, covering many perspectives and practices (Hutchings, Huber and Ciccone, 2011; Kreber, 2002). It has been variously described as a 'multidimensional construct' (Vithal, 2018, p.13) and a 'big tent' (Huber *et al.,* 2005, p. 4). The big tent analogy, which characterises SoTL as a space of inclusivity and collaboration (Chick, 2014), has been criticised for neglecting the existence of tensions and disagreements within the SoTL community. These have more recently been identified as ISSOTL GCs (Scharff *et al.,* 2023) and serve to direct future SoTL inquiry. To enhance understanding and appreciation of scholarship emanating from diverse disciplinary traditions, it is imperative that SoTL scholars understand and confront their own biases, which are often influenced by academic and professional pathways. This is because SoTL resides in the disciplines and, as such, takes on a discipline-specific ontology and epistemology.

Kern *et al.* (2015), in their Dimensions of Activities Relating to Teaching (DART) Model (see Figure 5), attempt an explanation of how SoTL may work within all four of Boyer's ***scholarships***. They divide teaching and scholarship into four quadrants along two dimensions (public to private and formal to informal). Accordingly, they posit that engaging in SoTL is the most representative of both the systematic and the public dimensions. Thus, academics focussing on SoTL are engaging in inquiry in a manner similar to that of disciplinary researchers: 'Problem posing about an issue of teaching or learning, study of the problem through methods appropriate to the disciplinary epistemologies, applications of results to practice, communication of results, self- reflection and peer review' (Cambridge, 2010, p. 8).



Kern, B., Mettetal, G., Dixon, M., & Morgan, R. (2015). The Role of SoTL in the Academy: Upon the 25th Anniversary of Boyer's Scholarship Reconsidered. *Journal of the Scholarship of Teaching and Learning, 15*(3), 1-14.

Figure 5: Dimensions of Activities Relating to Teaching (DART) Model

Felten's (2013) SoTL principles support and reflect how academics adopt criticality as they research their practices. Accepting that SoTL definitions vary,

Kreber (2013, p. 859) further reports *teacher-led pedagogical research* and *self-study* as synonymous. Contrary to the multitude of SoTL definitions, Healey (2003), Booth and Woollacott (2015) and Fanghanel *et al.* (2015) argue that further searching for definitional certainty may hinder SoTL progress. Publications one and two investigate the troublesome nature of defining SoTL. Evident and common in SoTL definitions is the continued focus on student learning, either as subjects of the inquiry or, as Felten (2013) encourages, cocreators of the SoTL output.

Describing SoTL as an act of 'going meta', Hutchings and Shulman (1999) imply the lens of SoTL itself can be a kind of theory. Their taxonomy of SoTL inquiries has become a touchstone for the field, organising the work of SoTL by the questions it asks: 'What works', seeking evidence about the relative effectiveness of different approaches; 'what is', describing what it looks like; and 'visions of the possible', framing learning experiences in new or different ways to change or enhance practice (Chick 2014). This taxonomy of questions is central to this thesis as it connects the publications and challenges the principles of doing SoTL in context. The challenges inherent in 'doing SoTL' are compounded by the current literature's limited recognition of faculty members' engagement in SoTL to enhance teaching and learning practices and, crucially, to bolster institutional reputation (Bernstein, 2013). This lack of acknowledgement hampers the broader understanding of how faculty, armed with SoTL expertise, can refine their teaching through scholarly approaches (Bernstein, 2013; Kern *et al.,* 2015) and elevate the teaching standards of non-SoTL-active colleagues by translating SoTL findings for their use, fostering adaptation and resisting neoliberal agendas (Kern *et al.,* 2015).

3. SoTL in the UK

The landscape of SoTL in the UK is undergoing a dynamic transformation shaped by evolving national frameworks like the Research Excellence Framework (REF), the Teaching Excellence Framework (TEF) and the Office for Students (OfS).

Historically, the REF focused on traditional research outputs with marginalised SoTL contributions. However, the 2014 REF marked a shift with the introduction of Unit of Assessment (UoA), 14 dedicated to Education, which more

recently moved to UoA 25 in the REF 21. While the immediate impact was modest, it acknowledged SoTL's potential within the academic sphere, sparking a dialogue about how SoTL could contribute to research excellence.

The TEF's introduction in 2017 further propelled SoTL into the spotlight. Its focus on measuring teaching quality necessitates evidence-based pedagogies. Here, SoTL research, with its emphasis on critical reflection, data-driven analysis and innovative practices empowered institutions to demonstrate teaching excellence. Academics engaged in SoTL can directly contribute to TEF submissions by showcasing how their scholarship informs and improves teaching within their institutions.

Established in 2018, the OfS prioritises student experience and graduate employability, core tenets of SoTL. SoTL research exploring the impact of teaching practices on student learning outcomes directly addresses these priorities. Furthermore, fostering a culture of evidence-based teaching aligns with the OfS's focus on developing robust student experience metrics. However, this emphasis on metrics within the OfS framework could potentially lead to a narrowed SoTL scope, privileging quantifiable outcomes over balanced, qualitative aspects of teaching and learning. This is because metrics can be reductionist, failing to capture the richness of the teaching and learning experience. Incorporating these evolving frameworks into SoTL practice presents both opportunities and challenges for academics in the UK. Two challenges in particular require careful navigation, the first potentially resulting in the second.

(i) The potential for a tick-box mentality: The OfS's focus on metrics could lead to academics prioritising data collection and reporting over deeper exploration of teaching and learning practices. This could result in a superficial approach to SoTL focused on meeting pre-defined metrics rather than genuine improvement.

(ii) The REF continues to prioritise rigorous research over practitioner-oriented scholarship. This can create a hierarchy within SoTL, where research-based SoTL activities are valued more than those focused on improving teaching practice.

This dynamic UK landscape demands a strategic approach. Striking a balance between quantitative and qualitative approaches may ensure SoTL research continues to offer insightful critiques and innovative solutions within a culture of evidence-based practice. Ultimately, SoTL has the potential to be a powerful tool, contributing to research excellence, demonstrably enhancing teaching quality and improving student experiences and outcomes.

This thesis critically reflects on how I leveraged my SoTL expertise to enhance teaching and learning in my courses whilst contributing to the advancement of my institutional and international colleagues' teaching practices (Bass, 2020). I achieved this through collaborative efforts, co-creating peer-reviewed articles and engaging in professional discussions. Survey metrics, such as the National Student Survey (NSS), become vital tools to substantiate claims made by Bernstein (2013) regarding the transformative impact of SoTL expertise on teaching practices and institutional reputation.

Navigating the landscape of SoTL methodologies poses inherent challenges. The six interconnected publications not only examine SoTL's micro (my teaching), meso (departmental colleagues) and macro (extra-departmental colleagues) contexts (Wuetherick and Yu, 2016), but also highlight the transformative potential of faculty engagement. In the next section, I evaluate the methodologies in the publications by demonstrating how this thesis responds to the complexities in designing SoTL studies, thereby contributing a nuanced understanding of Felten's (2013) third principle on using robust methodologies.

4. SoTL Methodology

SoTL is shaped by multidisciplinary research contexts (Hubball *et al.,* 2013). Researchers have argued that SoTL internalises theory and practice through a systematic and cyclical process of inquiry that involves hypothesis testing, planning, observing, analysis, review and action (Hubball *et al.,* 2013; McKinney, 2012). Thus, SoTL provides unique opportunities for practitioners to reflect on, and initiate, positive changes to their teaching and learning practices as well as engage students and colleagues in the process (Hubball and Gold, 2007). SoTL inquiry embraces diverse and distinct methodologies, reflecting the multidimensional nature of educational research. Empirical studies, often

conducted through surveys and assessments, seek quantifiable evidence of teaching effectiveness and student learning outcomes. Ethnographic and qualitative approaches probe the lived experiences of educators and learners, unravelling the complexities of teaching practices within specific cultural and contextual frameworks. Action research, a practitioner-driven methodology, empowers educators to actively engage in reflective practices, implementing and refining strategies to enhance teaching and learning. These diverse methodologies collectively contribute to the rich tapestry of SoTL inquiry, showcasing the field's adaptability and responsiveness to the complex dynamics of educational environments. Evidence-based accounts generated through these varied approaches and evidenced in the six publications highlight the multifaceted nature of effective pedagogy, ensuring a subtle understanding of teaching and learning in diverse educational settings.

Although my SoTL inquiry uses a range of mixed methods, I prefer using qualitative interpretivist and personal narrative methodologies to examine interactions as they happen. This is illustrated in Table 1, which highlights the range of methods used within the submitted publications. The reference to interpretivism reinforces a philosophical alignment with understanding how individuals' behaviours and thoughts are shaped by socio-cultural influences. This resonates with my ontological views, emphasising the significance of personal experiences and socio-cultural context in shaping learning outcomes (Myers 2008), and dovetails with my student-centred philosophy that places individuals at the centre of the research, seeking to comprehend the intricacies of their experiences. Each methodological approach in the six publications accounted for practical considerations specific to the situation, thereby ensuring its suitable alignment with the research question (see Table 1 in Appendix 1).

5. Critical Summaries of the Submitted Publications

The journey within each publication spotlights a significant milestone in my personal and academic developments in using and evaluating SoTL research. Whilst the main thread is SoTL, there are the parallel sub-threads of WP, LLL and PM that are incorporated into the SoTL thread. The first two critical appraisals consider the barriers in SoTL, such as academic identity and the troublesome

knowledge (TK) and value of SoTL. This is followed by reflection on supporting SoTL development through review of publication three. Publications four and five focus on SoTL practice in a WP context (designing feedback and PM), whereas publication six advocates for change and opportunity (benefits) in supporting and developing students holistically as lifelong learners (see Figure 2 for a schematic representation of the summaries).

5.1 Critical Summary 1

Simmons, N., Abrahamson, E., Deshler, J. M., Kensington-Miller, B., Manarin, K., Morón-García, S., and Renc-Roe, J. (2013). Conflicts and configurations in a liminal space: SoTL scholars' identity development. *Teaching and Learning Inquiry*, *1*(2), 9-21.

This publication addresses the thesis question around the benefits and barriers of engaging with SoTL by relating personal experience to identifying the challenges surrounding SoTL practice and value. The order of authorship was determined by leadership roles within the International Collaborative Writing Group (ICWG), with Simmons, the group leader, appearing as the first author. Each author's specific contribution aligned with their expertise and experiences, contributing to the work's diverse and interdisciplinary nature. My contribution lay in connecting sports therapy with SoTL identity, an area that previously received limited attention in the SoTL literature. Through our reflective narratives, we contribute to knowledge by exposing the silence surrounding SoTL practice and offer solidarity to other academics who may experience similar feelings and thoughts around SoTL identity and practice. Previously, few studies considered what it means to be a SoTL scholar.

The article responds to an important lacuna in the literature on shaping academic identity through SoTL engagement and moving from scholarly teaching (private domain) to SoTL (systematic and public domain) (Kern *et al.,* 2015). The prevailing research on academic identity focussed on describing staff acclimatisation into an academic HE role. Much of the literature lacked exploring staff personal experiences and challenges in creating a SoTL community of practice (cf Trowler and Knight, 2000; Jawitz, 2007). In this collaborative work resulting from participation in the ISSOTL ICWG experience, we, a group of eight

international scholars, deconstruct SoTL by critically examining definitions, philosophies and practices to scrutinise how engagement with SoTL has shaped our academic and professional identities.

We argue that SoTL has traditionally been practised by scholars within a central HE teaching and learning role and that existing SoTL research fails to recognise how SoTL transcends and intersects disciplinary identity (Bennett, 2016). As interdisciplinary scholars, we have struggled to define the value, purpose, outcomes and meaning of being a disciplined SoTL scholar, sometimes in addition to and sometimes in opposition to being a disciplinary scholar, thereby elucidating the challenges and barriers in practising SoTL from multiple disciplinary and professional perspectives. Central to the publication narrative was the realisation of how navigating conflicting identities, such as the balance between SoTL and disciplinary research, can lead to a troublesome but reflective liminal space, prompting a reshaping of academic identity, but at what cost to professional career development? Many aspects of identity and its influence on teaching and learning are worthy of SoTL inquiry. First, understanding identity in any context is challenging because it is internal and multifaceted. Even though some identity characteristics are frequently inferred through observation (e.g. gender, race, age) leading others to make assumptions (MacNell, Driscoll and Hunt, 2015), as a whole, identity is not directly visible to others. Aspects may even be outside an individual's awareness. Furthermore, identity-based assumptions need to be examined to foster a more inclusive approach to SoTL.

Four key limitations exist within the research. First, we do not fully challenge the assumptions around the inherent disparities between disciplinary norms and SoTL's epistemological orientations. Disciplines use well-established methodologies, paradigms and criteria for knowledge validation, rooted in empiricism, positivism, or other established traditions (Trigwell and Shale, 2004). In contrast, SoTL embraces qualitative, reflective, or mixed methods approaches, emphasising a constructivist or interpretive viewpoint. SoTL inquiry starts with a question that informs the methodology; this is often in opposition to scientific research that plans the methodology to consider the research question. These fundamental epistemological differences are often a significant obstacle to identifying with SoTL within disciplines, as they challenge the established

disciplinary norms of evidence. Second, while SoTL inherently encourages interdisciplinary collaboration, we neglect some research findings indicating how faculty members, deeply entrenched in their disciplinary identities, are challenged to collaborate effectively outside their field (Barkhuizen, 2021). The definitional and language divide of the term SoTL is a major barrier, making it problematic to research (Manarin and Abrahamson, 2016). Third, whilst we reflect upon SoTL as scholarship, we pay limited attention to scholarship that includes SoTL, an important distinction as not all scholars identify with SoTL and find some SoTL conventions and terminology troublesome (Bennett, 2016). Finally, our work centres on personal narratives without sufficient focus on appropriate theoretical frameworks to support the claims we make.

Considering the limitations from publication one, publication two attends more purposefully to questions around how HE academics navigate the inherent disparities between disciplinary norms and SoTL's epistemological orientations. Article one did not identify specific transitions to SoTL practice. SoTL was seen as TK that continues to trouble practitioners. Building upon the work of Bennett (2016) and motivated by an interest in how academics choose to portray their identity, article two responds to the limitation around transitions to SoTL practitioner by drawing on data from an online survey and semi-structured interviews to consider how SoTL experiences shape, support, or hinder academic identity and knowing.

5.2 Critical Summary 2

Manarin, K., and Abrahamson, E. (2016). Troublesome Knowledge of SoTL. *International Journal for the Scholarship of Teaching and Learning*, *10*(2), 2.

This publication further addresses the thesis question concerning SoTL's visions, benefits and barriers by investigating international SoTL practice and perceptions. Through this work, we contribute to knowledge in three distinct ways. First, by applying Lieff *et al's.* (2012) model in a way not previously considered in the SoTL literature, categorising the findings according to dynamic factors of personal, relational and contextual. This enabled us to reposition SoTL identity literature by

suggesting that SoTL serves to illuminate and expose tensions created by competing pedagogical and disciplinary values. Second, we suggest that valuing SoTL can itself be a threshold concept (Meyer and Land, 2003) with the potential to disrupt traditional views of teaching and learning by using a scholarly approach to pedagogy. Whilst threshold concepts are explored within the SoTL literature, little research identifies SoTL as a threshold concept. This was later corroborated by Shopkow (2017), drawing synergies between our work and future SoTL thinking. Finally, by exposing arguments around how subjectivity can challenge the traditional objectivity valued in many academic disciplines, we encourage scholars to navigate a space where interpretation and multiple perspectives become the norm. My specific contribution lay in reconsidering SoTL as a threshold concept and then using a theoretical framework to relate the troublesome nature of SoTL to the framework's dimensions (Meyer and Land, 2006). This enabled the application of an existing theory in a new way by making explicit the different interpersonal constructs necessary for navigating the troublesome nature of SoTL and forging connections and identities with SoTL practice as detailed in publication one.

Three key limitations exist within the research. First, we investigated only one perspective of TK and did not fully analyse how the lack of standardisation and consistency in SoTL inquiry, elucidated by Hutchings and Shulman (1999), can be perceived as TK. Just as TK disrupts established cognitive structures, the absence of a universally accepted SoTL framework challenges traditional notions of teaching and learning, leading to confusion around the value and purpose of SoTL practice. Second, we recognise that a more profound consideration of the subjectivity of SoTL research and its potential to introduce cognitive dissonance, akin to Perkin's (2006) troublesome conceptual space, could significantly enhance future SoTL inquiries. Third, whilst our work provided insights into the different interpersonal and situational SoTL conflicts, it could be strengthened by analysing how conflicting factors interact within different SoTL contexts. Context is central to understanding SoTL practice (Felten, 2013), as the majority of SoTL studies are conducted in specific institutional and disciplinary contexts, making it a challenge to generalise findings across diverse educational settings.

The publication exposed tensions around conducting SoTL inquiry and foregrounded the need to carefully review SoTL publications to better align context with content and meaning with methodologies. It further highlighted the need for SoTL journals to revisit how authors from different geographical contexts develop their scholarship and provide insight into defining and doing SoTL. Moreover, it called attention to the importance of reviewer expertise.

In article three, I develop the notion of reviewer expertise, foregrounding the delicate tension between SoTL identity and practice outlined in this publication to promote the potential for transformative dialogues that transcend the pages of a manuscript and resonate within the broader scholarly community.

5.3 Critical Summary 3

Abrahamson, E. D. (2022). The People Behind the Publications: Reflections on a Decade of Reviews. *Teaching and Learning Inquiry*, *10*.

This article further addresses the thesis question around visions of the future, benefits and barriers of doing SoTL by incorporating personal reflections on the review process for SoTL publication. It connects to SoTL writing as a threshold concept (identified in publication two) by investigating the challenges authors face when navigating SoTL research and writing SoTL articles (Trigwell and Shale, 2004; Bennett, 2016). The article further uses each of the three questions in Hutchings and Shulman's taxonomy, discussed in section 1.6, to consider the value and impact of SoTL research by considering how authors structure their SoTL inquiry. The article focusses ISSOTL's attention on redesigning writing experiences to facilitate inclusive contributions, encompassing both traditional and public ICWGs. Such emphasis has additionally prompted a contemplation of the individuals involved in the publication, unveiling the authors' journeys, the questions they pose, and the experiences they engage.

Through this work, I contribute to knowledge in three distinct ways. First, I draw upon a decade of personal experience in engaging with SoTL inquiry. This experiential approach enriches the understanding of the publication process and provides guidance for colleagues new to SoTL as recognised in the work of Mårtensson and Schrum (2022). It further exposes challenges associated within the review process itself. SoTL manuscripts often explore the nuances of

pedagogy, curriculum design, and educational strategies which can be highly context dependent. Reviewers may find it challenging to separate their personal teaching philosophies and experiences from the objective evaluation of a manuscript. This subjectivity can introduce bias into the review process, potentially influencing the assessment of the manuscript validity and relevance. Second, I emphasise the importance of designing feedback that supports colleagues from diverse social and academic backgrounds, promoting context diversity in SoTL publications (Gansemer-Topf *et al.,* 2022). This emphasis on diversity augments the SoTL community and ensures that it caters to a broad range of perspectives. Finally, I challenge traditional conventions in SoTL publication, advocating for the inclusion of a range of public SoTL outputs, such as blogs, podcasts and websites (Mårtensson and Schrum, 2022). Such endeavours expand the landscape of SoTL practice and enhance the dissemination of its outputs.

Even a review article that has considered both the process and product of SoTL output has its limitations. The article has one main limitation: It primarily focusses on personal reflection. In the pursuit of robust and inclusive knowledge, the potential pitfalls of relying solely on personal reflection become evident. To extrapolate insights beyond the confines of individual narratives, a more comprehensive approach is necessary. Embracing external viewpoints, empirical evidence and a broader scope of experiences helps counterbalance the inherent limitations of personal reflection. Drawing upon personal experiences and anecdotes may not provide a rigorous empirical analysis of the challenges in developing and designing future SoTL publications aligned with the GC (Scharff *et al.,* 2023).

This article directs attention towards redesigning writing experiences (Mårtensson and Schrum, 2022), emphasising the need to recognise how colleagues from diverse academic and disciplinary backgrounds perceive and use feedback and critical review commentary of work. This is important as SoTL is predominantly social science research, making it challenging for academics from a range of disciplines to recognise and value the discourse and methodologies used in SoTL inquiry (Scharff *et al.,* 2023). Aligned with Brookfield's (2017) self-

reflection lens, an explicit understanding of feedback development is crucial for supporting the review of others' work.

In publication four, I explore the intricate connections between peer reviewing and providing feedback, particularly through online platforms such as Turnitin. It serves as a nexus where I question the purpose of feedback, a query with resonances across both peer-reviewed manuscripts and student assessments.

5.4 Critical Summary 4

Abrahamson, E., and Mann, J. (2018). For whom is the feedback intended? A student-focussed critical analysis of Turnitin software as a tool for learning. Journal of Pedagogical Research, 2(3), 146-166.

Drawing upon the importance of feedback in the review process as identified in publication three, publication four extends the context to reflect more critically the design of feedback for learning by addressing the thesis question around practising SoTL in a WP environment. By seamlessly connecting SoTL with evidence-informed practices, we posit that educators strengthen the very foundation of meaningful student feedback, cultivating an environment where learning is not only assessed but intricately shaped to empower and inspire each student's academic journey. Writing this article reflected a truly shared effort, building not only on my experience of taking a major role in designing the study and consulting with Turnitin but also on my previous experience in promoting evidence-based SoTL practice (Manarin and Abrahamson 2016, Abrahamson, 2022).

How both staff and students perceive and utilise feedback as a pedagogical tool to inform changes in learning and teaching practices presents a significant challenge in HE. Students from diverse backgrounds and learning styles perceive feedback as a critical element influencing their self-regulated learning (Nicol and Macfarlane-Dick, 2006; Hounsell, 2007), prompting staff to delicately balance constructive criticism with positive reinforcement. Simultaneously, staff face the challenge of designing feedback that is both academically rigorous and culturally sensitive and inclusive.

To underscore its distinctive contribution to SoTL, this article synthesises insights drawn from prior SoTL research, as elucidated in publication three. The study highlights the critical necessity for feedback practices that are informed and context specific (Felten, 2013). By exploring pedagogical significance of online feedback systems relevant to WP in HE, this work advances SoTL literature by offering nuanced perspectives on the transformative potential of purposeful feedback design in diverse academic settings, such as using accessible language in delivering student feedback.

The knowledge contribution is notable in three ways. First, the paper challenges the conventional perception of Turnitin as a tool solely for detecting academic misconduct (AM), repositioning it as a software platform for learning, with specific emphasis on scaffolding the academic writing process by showing sports therapy students what good writing looks like. This was a key development in enabling educators to reimagine the value and use of online learning systems such as Turnitin, an area not fully investigated in the literature. Second, the study's findings have significant implications for HEIs with a WP agenda. It provides practical software development recommendations that can benefit students from diverse backgrounds and support them in improving their writing skills and academic confidence, thereby enabling their success (Tay, 2023). This was particularly pertinent within the UG sports therapy programme. For example, by using Turnitin to illustrate what good writing looks like, sports therapy students were able to consolidate their learning and develop academic confidence in their writing and learning abilities. This shifted the value and focus of the software away from plagiarism and AM to learning enhancement and academic confidence. This enabled both students and staff to appreciate how feedback is designed and used for learning, not simply a measure of learning. Third, the article recognises the complex relationship between research and practice. It highlights the importance of evaluating the process questions typically associated with qualitative research and acknowledges the non-linear and ambiguous nature of this relationship. Despite the value the article brings to designing feedback for learning, several limitations need consideration. First, its limited scope. The study's sole focus on Turnitin as a feedback tool for academic writing development may limit the generalisability of its findings. Second, the findings are based on a small group of

staff and students from a single UK institution. A study centred on a small sample from a post-92 UK WP university may encounter inherent limitations affecting the generalisability and robustness of its findings. Namely, the narrow participant scope may not adequately represent the diverse demographics and academic profiles found in the broader student population. The unique characteristics and challenges faced by students in post-92 institutions, particularly those related to WP initiatives, may not be fully captured, limiting the study's external validity. Furthermore, the specific context of a post-92 university may introduce factors that are institution-specific and not easily extrapolated to other higher education settings. The academic programmes, support services and campus culture in post-92 institutions can differ significantly from those in traditional universities, making it challenging to extend findings beyond this specific context. Additionally, the homogeneous nature of a small sample from a single university may obscure variations within the WP cohort. Students from diverse backgrounds may have unique experiences and needs that a small sample might fail to adequately capture, diminishing the study's capacity to provide nuanced insights.

Whilst acknowledging its limitations, the article highlights Turnitin's transformation as an instructional tool, shedding light on its ability to help students understand effective writing and emphasising the positive impact of providing accessible feedback in improving academic work. Notable scholars, such as Trigwell and Shale, have stressed the importance of SoTL in enhancing the quality of education by fostering a reflective and research-informed teaching environment (Trigwell, 2012). In the context of Turnitin's evolution, the integration of accessible feedback aligns with SoTL's core tenets, contributing to a pedagogical landscape that is not only technologically advanced but also grounded in evidence-based instructional strategies (Hubball and Clarke, 2010). This theme builds towards the goals of publication five, which explores the objectives of PM initiatives in HE, outlining the vital connection between peer relationships and student success.

The suggested recommendations in this article, especially those related to structuring feedback for educational purposes, provide valuable guidance for peer mentors supporting student learning experiences. The untapped potential of tools like Turnitin reinforce academic progress and enhance students' skills, such as academic literacy and confidence (Tay, 2023). In publication five, we assess the

value and consequences of peer mentoring initiatives in Health and Sport Sciences. This establishes connections with sub-themes related to transitions, challenges and support, whilst highlighting academic confidence, as crucial elements in shaping the educational experience of undergraduate sports therapy programmes.

5.5 Critical Summary 5

Abrahamson, E. D., Puzzar, C., Ferro, M. S., and Bailey, S. (2019). Peer mentors' experiences and perceptions of mentoring in undergraduate health and sports science programmes. Journal of Pedagogical Research, 3(2), 21-37.

This article attends to the thesis question around visions of the possible by using Felten's (2013) model of good SoTL practice, especially students as partners, to evaluate a mentoring project to support transitions in HE within a WP context. Felten's (2013) SoTL framework, as identified within this thesis, is central to considering key components for engaging in good SoTL practice. As principal investigator, I led the study design by connecting the Sports Mentoring Inclusive Learning Experience Scheme (SMILES) project with other mentoring projects in the school of Health, Sport and Biosciences (HSB) to better compare and contrast mentoring experiences.

The study found that constructive and destructive friction exists between how mentors perceive their mentorship role and the strategies and skills they develop and use during their mentorship experiences. It drew synergies between key conceptual ideas in article four, such as the understanding that assessment feedback is not merely a static document but a roadmap for improvement, with emerging actions that demand attention and understanding. Publication five connects these ideas by emphasizing the pivotal role peer mentors play in contextualising learning actions, helping mentees discern what needs improvement and devising strategies for effecting positive change, such as interpretation of feedback identified in critical appraisal four. This dynamic interplay between mentor and mentee can transform learning dynamics from a potential source of confusion into a collaborative experience. Publication five

contributes to knowledge in three distinctive ways. First, the article builds on previous research (Kuh, 2008; Yorke *et al.,* 2022) and expands the idea of creating partnerships and supporting student transitions into HE by foregrounding peer mentoring as a key intervention strategy not effectively considered in the WP literature. Expanding the concept of mentoring partnerships significantly contributes to the literature, addressing the evolving needs of WP students. Second, the article discusses the enhancement of SMILES, developed at the UEL to support WP in HE. It is noteworthy that SMILES received funding through the widening access and participation fund overseen by Office for Students (OfS) and has a substantial positive impact on student transitions into HE. This was evident in the reduction in the BAME awarding gap in Sports Therapy by 13 percentage points (2015-2019). Finally, the study addresses a significant literature gap by focussing on the perceptions and experiences of peer mentors in UG health and sport science programs. Previous studies emphasised mentee experiences (Allen *et al.,* 2004; Eby *et al.,* 2008); this work gives voice to mentors, thereby enriching understanding of peer mentors' relationships to mentoring.

Whilst the article provided context-based insight into mentoring within a health and sport environment, its limitations are evident in two ways. First, consideration of the role and value of compassion within the mentoring process is limited. This omission in publication five, becomes central to the genesis and need for the T-shaped model in publication six. Compassion, an intrinsic component of supportive relationships, plays a pivotal role in mentor-mentee interactions by fostering empathy, understanding and a conducive learning environment. Its omission overlooks a crucial dimension in mentorship, as compassion contributes significantly to the emotional well-being and motivation of mentees. Integrating compassion-focussed pedagogy theory into the discourse on mentorship acknowledges the importance of empathy in the mentor-mentee relationship and provides a more holistic framework for cultivating meaningful, supportive connections that go beyond mere academic guidance (Gilbert, 2017). Recognising this omission in publication five, I designed study six to include compassion as a core component of LLL. Second, the sample of predominantly mature, white, female mentors may limit the generalisability of the findings, as these mentors' experiences significantly differ from those of the diverse mentee

group they support. We acknowledge this limitation and recognise the richness of interview discourse, which allows researchers to explore mentoring impact from various contextual dimensions. This acknowledgement of contextual diversity resonates with the exploration of LLL in publication six. Peer mentoring, at its essence, functions as a transformative conduit to LLL. It seamlessly integrates academic guidance with a deep commitment to holistic education, fostering intellectual development and a comprehensive range of skills, values and personal growth. This synthesis encapsulates an individual's lifelong journey of learning and self-discovery, illustrating the interconnectedness of peer mentoring with the enduring pursuit of knowledge and personal enrichment.

5.6 Critical Summary 6

Eady, M. J., Abrahamson, E., Green, C. A., Arcellana-Panlilio, M., Hatfield, L., and Namaste, N. (2021). Re-positioning SoTL toward the T-shaped Community. Teaching and Learning Inquiry, 9(1), 262-278.

This article further addresses the thesis question of visions of the possible and SoTL benefits by reconceptualising SoTL as a necessary framework for transforming HE learning. The order of authorship was determined through drawing names from a hat, reflecting the process and practice within the ICWG. I led the model's development and design by relating context to content and facilitating discussion around connecting academic skills with professional and graduate attributes as expounded by Fung (2017). I further drew upon my person-centred teaching philosophy to construct a model that held student success central to its core.

In this article, we discuss the transformative shifts taking place in HE, particularly the move towards LLL. While HE has traditionally been concerned with preparing students academically, we posit that preparation for life-ready graduates is quickly surfacing and equally important. We suggest shifting to a more humanistic lens on HE encouraged us to design the SoTL T-shaped model, which serves to balance academic skills with LLL ones. The SoTL T-shape model evolved through reflection on teaching and learning interventions, such as academic identity (publication one), feedback practices (publication four) and PM

(publication five). These reflections serve a model design that carefully balanced academic with LLL skills.

The contribution to knowledge is evident through three main developments. First, the article provides a valuable conceptual framework for connecting SoTL with holistic education. Drawing upon the omission of compassion-focussed pedagogy (Gilbert, 2017) identified in publication five, the T-shape model challenges conventional views of SoTL as primarily focussed on academic development, instead positioning SoTL as a change agent for promoting holistic values within HE institutions. This new SoTL application moves past understanding the influence of teaching on learning and encourages connection to LLL skills and attributes (Fung, 2017; Cook-Sather and Felten, 2017). Second, we have impacted the international discourse on promoting holistic learners in modern society. Our conceptualisation of SoTL as a catalyst for change has led to a fundamental shift towards producing graduates with a broader skill set, a move away from academic-focussed models and an alignment with LLL goals. Finally, the article's continued citations in international SoTL literature (Chaka *et al.,* 2022; Wetcho, 2022; Mohd-Yosuf, 2022) signifies its impact on the field. This recognition highlights our contribution to shaping future SoTL inquiries and discussions around reconceptualising SoTL outputs.

Whilst the strength and contribution to knowledge is notable, two key limitations are evident. First, the article introduces the concept of SoTL as a ‘fulcrum and thread’, which, though innovative, readers might see as confusing. The article does not fully justify how this model is implemented in practice, which can limit its practical applicability. After this publication, our continued evolution of this work focusses on the model’s application in different contexts, thereby enabling the development of T-shaped values to underscore how educators integrate LLL into the curriculum. Second, the SoTL T-shaped model is developed on the experiences of six international scholars, with limited reference to other LLL conceptual models. This limitation could raise questions about the model's value and applicability in different contexts. For example, an approach centred around a particular cultural or linguistic context might face challenges when implemented in a multicultural or multilingual setting, hindering its adaptability and overall efficacy.

The publication has enabled a review of critical SoTL issues (presented at three international SoTL conferences and subject of a new text) and the development of future and further analysis of the values that are central to the T-shaped model.

6. Conclusions and Future Directions

The aim of the thesis, was to address two key questions through six interconnected publications:

1. What are the barriers and benefits of identifying with and practising SoTL?
2. How does using a SoTL framework to design the UG sports therapy curriculum within a WP UK university affect the student learning experience?

In addressing these questions, I have argued that originality, rigour and significance characterised the thesis and interacted in generating a coherent body of work. This made, I claimed, a distinct contribution to SoTL's evolution, indeed its reconceptualisation as an interdisciplinary field, as well as to the current state of knowledge within this field by challenging convention and enabling others to see SoTL visions of the future. My original contributions to knowledge integrate previously disparate literature on academic and SoTL identities, offering educators a more holistic framework. Furthermore, I reconceptualise SoTL as troublesome knowledge, highlighting its complexities and personal dimensions. Beyond theoretical advancements, my research champions inclusivity in SoTL publications and demonstrates how technology like Turnitin can be a powerful pedagogical tool. Finally, I address a critical gap by exploring the experiences of mentors in SoTL and propose a transformative T-shaped model for understanding SoTL's role in a rapidly evolving HE landscape.

I suggest that SoTL's value in the current UK educational climate lies in its ability to promote evidence-based teaching practices (publication three), contribute to quality assurance processes (publications three and four), address the needs of diverse student populations (publications four, five and six), support professional development (publications one and two) and align with national and institutional priorities for high-quality education, especially as it relates to UG curriculum design for sports therapy (publications four, five and six).

A key emphasis within the thesis is that context is critical for defining SoTL. For example, precise definitions that do not take the local institutional context into account may impede SoTL impact and growth. Definitions are about both setting boundaries and stating the essential nature of something (Simmons and Marquis, 2017). Myriad perspectives, disciplines and institutional contexts aside, the essence of "the overall intention of SoTL is to improve student learning and enhance educational quality" (Poole and Simmons, 2013, p.118). The second thesis question speaks directly to the SoTL's impact on the student learning experience, exploring how using SoTL is fundamental for discovering how teaching impacts learning and how teaching-focussed staff need to reconsider learning through learner eyes and journeys. By placing, as I did here, this body of SoTL research in a WP context, the contribution this research may have made towards achieving a greater understanding of the practice, theory and discourses within SoTL inquiry may become apparent. Moreover, the collaborative nature of SoTL encourages interdisciplinary dialogue and cross-institutional partnerships. This collaborative ethos, I argue, extends beyond the confines of individual classrooms, fostering a collective commitment to excellence in education.

By expanding the six submitted publications and carefully scrutinising the limitations in each, my continued and future SoTL outputs focus on interconnected SoTL networks that can share best practices, conduct cross-disciplinary studies and collectively contribute to a global repository of knowledge that informs curriculum design at a macro level. This has resulted in my recent appointment as co-editor for the ISSOTL journal – *Teaching and Learning Inquiry* (*TLI*). Through the six submitted publications, I define my future work against three interrelated themes: First, identity and SoTL leadership, second, mentoring and compassion and third, holistic education in preparation for real world application of student skill sets.

6.1 Identity and Leadership

I continue to use my SoTL leadership experience to develop a UK national teaching-focussed network that supports staff new to scholarship (currently supporting 225 staff) by connecting resources and journeys. This work has been

favourably received as evidenced in symposia and conference presentations (ANTF Symposium, Advance HE conference, 2022, 2023). Emanating from this work is the design of a new scholarship website that connects a range of resources, events and learning activities (to be launched in May 2024). Moreover, as a result of my continued work to support inclusive SoTL inquiry, I was invited to lead international writing groups to better prepare authors for publication and work with them to understand their challenges, their strategies and their stories. In revisiting the findings from publications one and two, I have collaborated with two international scholars to investigate ICWG co-leaders' identity in supporting SoTL publications. This not only aligns with identity and SoTL's troublesome nature by exposing debates around ontologies, epistemologies and methodologies, but further relates to publication three and the publication of SoTL outputs by recognising strategy for inclusive SoTL practice. This has directly resulted in co-authorship of a new text documenting critical SoTL issues wherein five cardinal issues are explored. First, that future SoTL inquiry needs to carefully consider methodological diversity, harmonising qualitative and quantitative approaches to ensure research is both comprehensive and robust. Second, the recognition and reward system within academic institutions must evolve to acknowledge SoTL contributions in areas like career advancement and promotion. Third, the integration of technology poses another challenge, requiring thoughtful consideration of issues related to accessibility and equity. Fourth, inclusivity and diversity require SoTL initiatives to encompass a broad range of perspectives, cultural contexts and student demographics. Finally, the effective dissemination of SoTL findings and their impact on teaching and learning practices remains a crucial hurdle, necessitating strategies to reach diverse educational communities and ensure tangible outcomes.

6.2 Mentoring and Compassion

Most of the thesis publications were published in the years preceding the pandemic crisis and spoke to a very different HE audience. Urgency arose postpandemic to address student mental health through empathy-driven teaching approaches. A limitation identified in publication five was the limited exploration of

compassion-focussed pedagogies (Gilbert, 2017). Additionally, compassion-focussed pedagogy can seamlessly integrate with place-based pedagogies (Smith and Sobel, 2014) by fostering an empathetic understanding of local communities, thus nurturing a deep connection between learners and the unique environmental, cultural and social contexts of their surroundings. In realising the impact of the pandemic crisis on student learning and seeking better ways, through peer mentorship, to support student mental health whilst in isolation, I codesigned a case study with students (Abrahamson, *et al.,* 2023). This case study examined how student mentorship (SMILES project), guided by SoTL practices, contributes to the development of a compassionate learning community. This work has been valuable in connecting PM with wider support strategies and enabling mentors to better recognise a range of stressors in different learning settings. It further exposes how, through crisis, renewed ideas and consideration for different support and mentoring structures become necessary. The lessons learned during the pandemic crisis provide useful insight into adapted practices for compassionate PM.

6.3 Holistic Education

In our continued work on LLL and holistic education, we posit that the T-shaped educator operates with an ethic of care, viewing students not merely as recipients of knowledge but as individuals on a transformative journey of empowerment and social responsibility. These educators transcend disciplinary boundaries, imparting not only subject matter content but also metacognitive skills, critical thinking abilities and global awareness (as evidenced in publication six). By nurturing a student-centred learning ecosystem, they provide fertile ground for students to explore, question and grow. T-shaped educators create future-focussed education and foster spaces for learning that are inclusive for all and meet United Nations (UN) sustainable development goals (SDG) around equality (e.g. SDG 5 and 10) and well-being (SDG 3). We encourage academics to consider five T-shaped values that inform how T-shape educators apply the SoTL T-shaped model in different contexts. These T-shaped values include context, research as integral, ethic of care, valuing and students as contributors. In this

context, our ongoing exploration aligns with addressing SoTL's five GCs, which serve as pivotal considerations for understanding and enhancing postsecondary teaching and learning (Scharff *et al.,* 2023). These challenges encourage us to foster critical and creative thinkers, encourage student engagement in learning, delve into the intricate processes of learning, examine the impact of identities on teaching and learning and explore the practice, use and growth of SoTL itself. As we navigate these challenges, our work aims to integrate these fundamental considerations with our T-shaped model, offering a comprehensive framework that resonates across personal, collaborative, institutional and global dimensions of higher education.

In conclusion, I recognise that SoTL holds diverse meanings for individuals, and it is precisely these variations in interpretation and application that give rise to barriers in the identity and practice of SoTL. 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. The analysis of SoTL methodologies reveals a dynamic landscape that encompasses both qualitative and quantitative approaches, effectively bridging the gap between educational theory and practice. While the current emphasis on rigour is evident, there is a recognised need for greater transparency in future reporting methods to enhance research integrity. SoTL methodologies should embrace innovation by integrating learning analytics in the design of learning experiences, whilst also adopting participatory and collaborative research approaches, such as involving students as co-researchers, to enhance authenticity and relevance. The overarching purpose of evolving SoTL methodologies is to advance educational scholarship, capturing the complexities of the learning environment and promoting inclusive practices that acknowledge the diverse nature of student populations and global HE contexts. While the benefits of using SoTL in the design of an UG STC are evident, critical attention must be paid to the identified barriers. This includes how the symbiotic relationship between authors and reviewers becomes the linchpin of intellectual progress. The urgency for reviewers to fervently support the academic endeavours of those who submit manuscripts is not merely a scholarly nicety but

a profound responsibility that propels the evolution of educational inquiry. Reviewers are the gatekeepers, the custodians of academic rigour, entrusted with the formidable task of discerning the intricate nuances of pedagogical exploration in submitted manuscripts. Their role transcends mere scrutiny; it is an act of mentorship, an investment in the collective pursuit of understanding the art and science of teaching and learning. Successful integration requires a considered understanding of the disciplinary context, active efforts to facilitate interdisciplinary collaboration, increased awareness and acceptance within the academic community and a careful balance between reflective narratives and theoretical underpinnings.

SoTL is also fundamentally linked to and informs visions of and practices (as emphasised in the critical appraisals) for strategic professional development, career planning, promotion and recognition (Fanghanel, 2013; Hutchings *et al.,* 2011; Mårtensson *et al.,* 2011). In this context, I argue, 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' (Bass, 2020) rather than a passive examination of generic teaching and learning issues. This has been central to the design of the WP UG STC.

Through the genesis of this PhD thesis, I have used reflection to examine my identity as sports therapy practitioner educator and have started to develop a renewed identity as SoTL scholar. This has enabled me to change my actions and take on new roles and remits institutionally (teaching and learning specialist), nationally (NTF and PFHEA) and internationally (ISSOTL advocacy). Part of this new identity involves recognising my role as a researcher as confirmed in my SoTL professorial promotion. My approach to research, reflected in the submitted publications, has moved from a positivist objective stance to my current understanding of knowledge as constructed, interpreted and situated. Through the writing of the critical appraisals, I have challenged my perspective on what constitutes SoTL knowledge and who gets to contribute to its growth. I now see SoTL research as vital for professional learning and an integral component of the development of identity, agency and voice within the HE teaching profession.

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Appendix 1: Methodological Map for the Six Publications

Appendix 1: Schematic Overviews

Thesis Themes and Sub-Themes

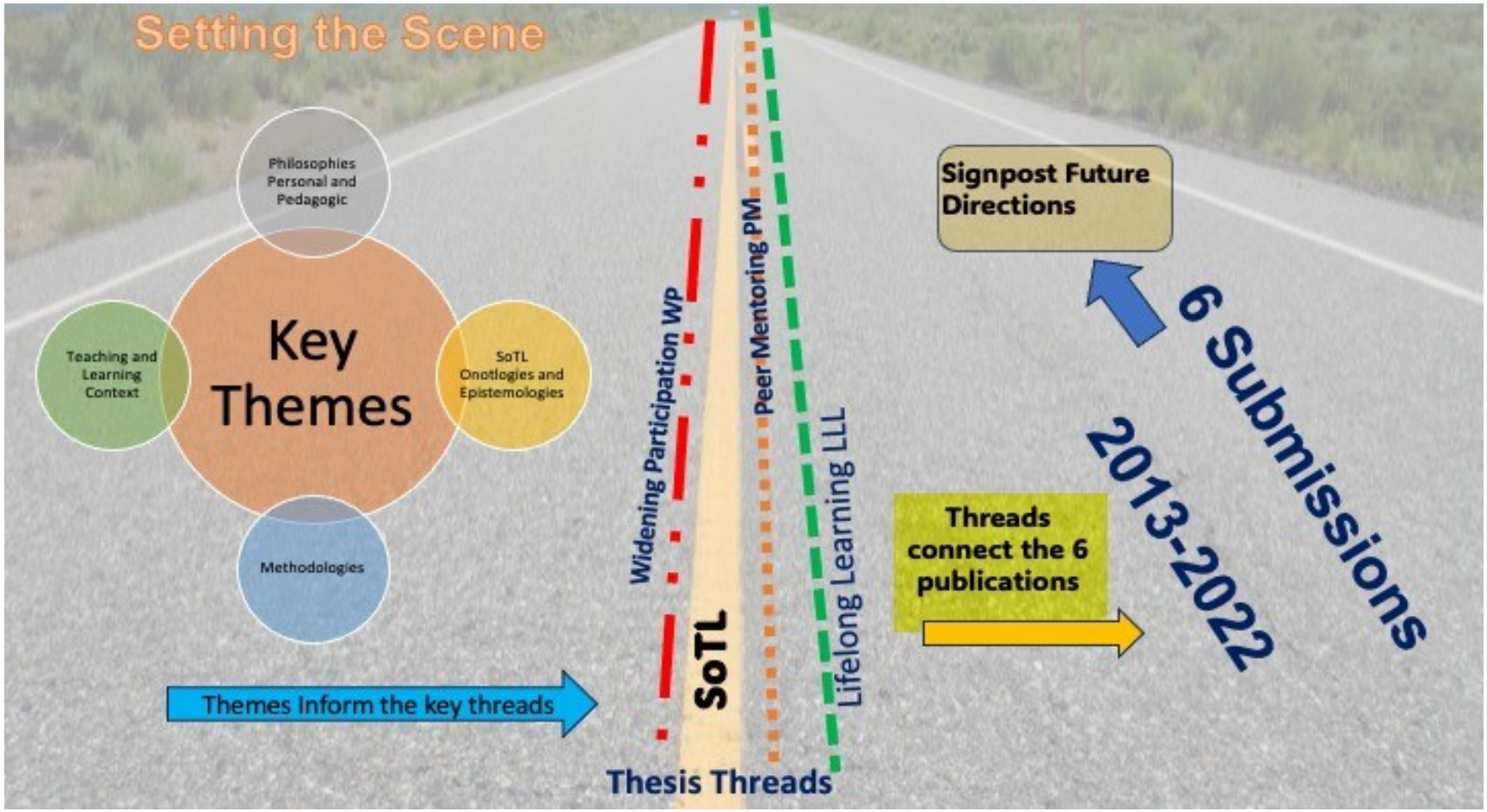

Figure 1: Thesis Overview

Overview of the Critical Appraisals

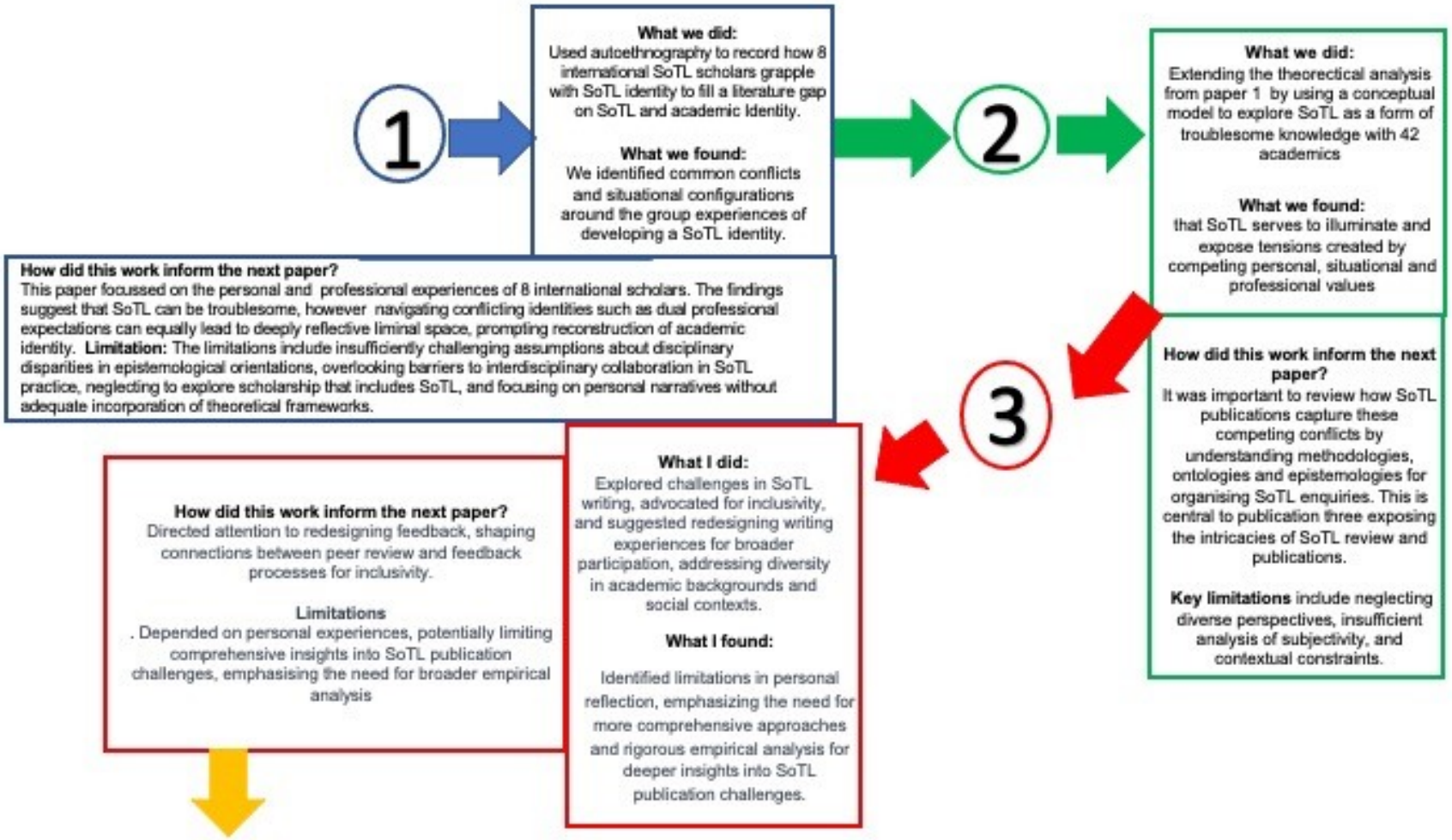

Figure 2a: Schematic Representation of the Critical Appraisals

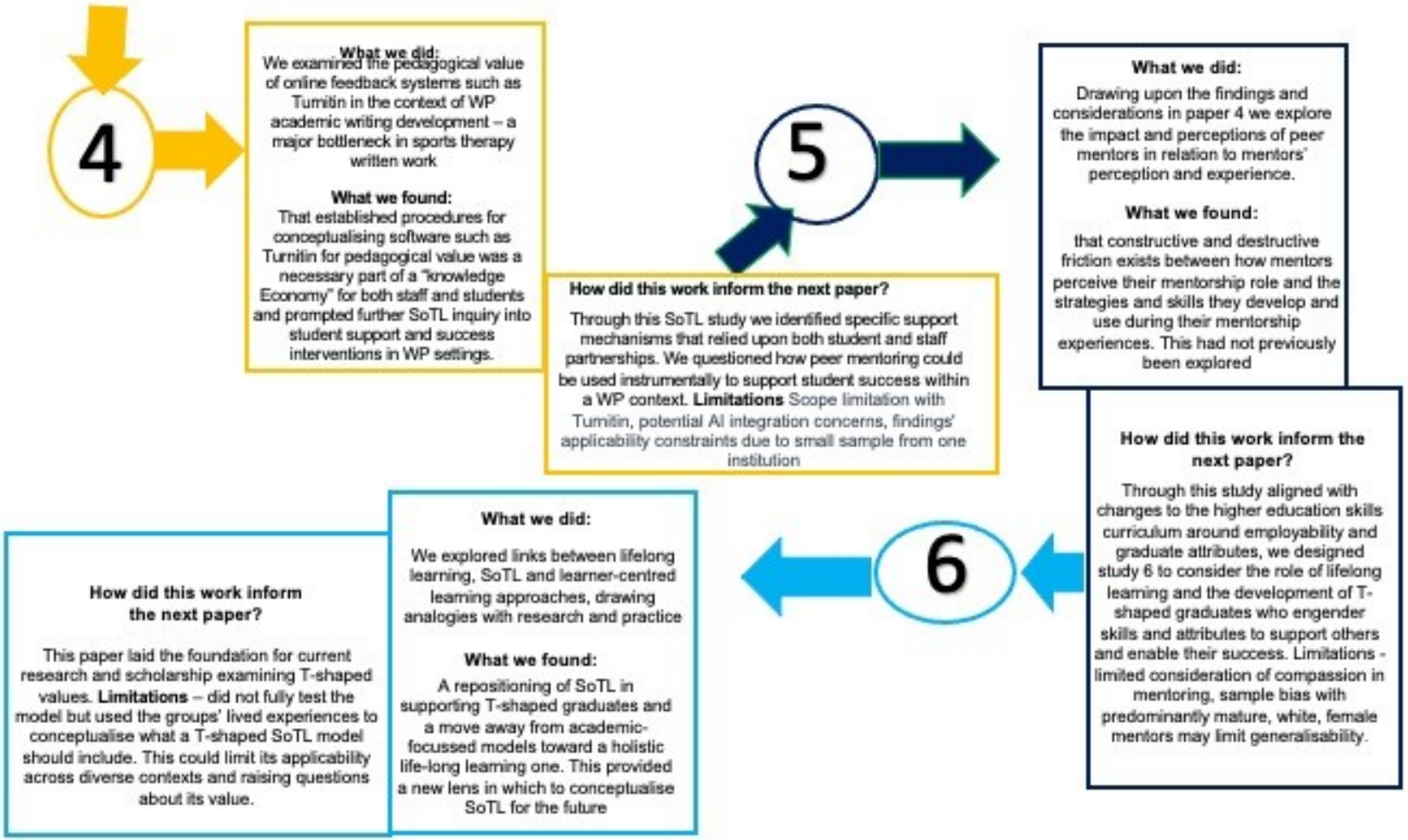

Figure 2b: Schematic Representation of the Critical Appraisals, cont.

Appendix 2:

Table 1: Methodological Map for the Six Publications

Paper	Methodological Approach	Data Collection Techniques	Impact
Simmons, N., Abrahamson, E., Deshler, J. M., Kensington-Miller, B., Manarin, K., Morón-García, S., and Renc-Roe, J. (2013). Conflicts and configurations in a liminal space: SoTL scholars' identity development. *Teaching and Learning Inquiry,* 1(2), 9-21.	Interpretivism and autoethnography	Thematic coding was used to identify and categorise recurring themes within the research, allowing for a systematic analysis of the qualitative data and facilitating the extraction of meaningful insights from the collaborative autoethnographic narratives.	The article has had substantial impact, as evidenced by its extensive citation by prominent SoTL scholars (Ross, *et.al.,* 2022; Healey *et al.,* 2019; Miller-Young, *et al.,* 2018; Chick, 2014) and presentations at ISSOTL conferences (2014, 2015, 2016, 2017).
Manarin, K., and Abrahamson, E. (2016). Troublesome Knowledge of SoTL. *International Journal for the Scholarship of Teaching and Learning,* 10(2), 2.	Mixed methods approach	Surveys were used to collect quantitative data, supplemented by semi-structured interviews to gather qualitative insights.	Published in a highly respected international SoTL journal, the article has over 20 citations (this is considered high impact for a SoTL journal, where the average for other articles in 13 citations) and has prompted discussions about the potential directions and visions for SoTL by prominent scholars such as (Simmons, *et al.,* 2021; Bailey, *et al.,* 2022; Tierney, *et al.,* 2020). In addition, the findings from the publication have been presented at three ISSOTL conferences (2016, 2017, 2019), allowing for the dissemination of evolving ideas regarding the troublesome nature of SoTL.
Abrahamson, E. D. (2022). The People Behind the Publications:	Interpretivism	Self-reflection was employed to engage in thoughtful	The lessons learned and underpinning narrative that frame

Paper	Methodological Approach	Data Collection Techniques	Impact
Reflections on a Decade of Reviews. *Teaching and Learning Inquiry,* 10.		examination, contemplation and analysis of personal experience. The subjective nature of self-reflection emphasises the need for transparency and critical self-awareness in the interpretation of findings.	the values and reach of this article have been widely acknowledged (Gansemer-Topf, *et.al.,* 2022; Mårtensson and Schrum, 2022).
Abrahamson, E., and Mann, J. (2018). For whom is the feedback intended? A student-focused critical analysis of Turnitin software as a tool for learning. *Journal of Pedagogical Research,* 2(3), 146166.	Grounded theory	Thematic coding was used as a nuanced technique for organising and categorising qualitative data.	Publication four has been widely cited (Tay, 2023; Hayden, *et.al.,* 2021; Davies, 2020; Zuma, 2020), and the recommendations arising from the findings have been adopted by Turnitin to support academic writing and feedback development.
Abrahamson, E. D., Puzzar, C., Ferro, M. S., and Bailey, S. (2019). Peer mentors' experiences and perceptions of mentoring in undergraduate health and sports science programmes. Journal of Pedagogical Research, 3(2), 21-37.	Qualitative	Semi-structured interviews with open-ended questions offered a flexible yet focussed approach, encouraging participants to articulate their experiences, opinions and insights in-depth.	Since appearing in a respected international journal, this article not only continues to be cited in multiple languages (Jensen, *et al.,* 2023; Lautwein, 2022; Saunders, et *al.,* 2022; Atalla, *et al.,* 2022; da Silva, *et al.,* 2021) but has further contributed to the development of mentoring projects internationally (Wollongong University (Australia), Elon University, (USA)).
Eady, M. J., Abrahamson, E., Green, C. A., Arcellana-Panlilio, M., Hatfield, L., and Namaste, N. (2021).	Qualitative (interpretivism)	Personal stories, anecdotes and reflective narratives were used. This qualitative synthesis	Evidence that my contribution appears to have advanced knowledge in challenging and

Paper	Methodological Approach	Data Collection Techniques	Impact
Re-positioning SoTL toward the T-shaped Community. Teaching and Learning Inquiry, 9(1), 262-278.		provides a holistic understanding of the complex interplay between theoretical concepts and lived experiences in teaching and learning research.	directing future SoTL inquiry is through continuing citations in international SoTL literature (Chaka *et.al.,* 2022; Wetcho, 2022; Mohd-Yosuf, 2022).

Appendix 3: Contributions to Knowledge

Table 2: Contributions to Knowledge

Dimension	Article/s	Contribution to Knowledge
Personal	Simmons *et al.,* 2013; Manarin and Abrahamson, 2016	My earlier publications significantly enhance an understanding of SoTL by introducing a critical perspective within diverse environments. While collaborative efforts in SoTL are customary, my work takes a proactive stance in establishing scholarly partnerships, fostering the exchange of international experiences, expertise and epistemologies. This deliberate approach advances SoTL inquiry and positions SoTL as a threshold concept, signifying its transformative and foundational role in shaping scholarly perspectives and understanding. Given my personal philosophy which champions WP and the significance of equal opportunities, it became imperative to connect with international scholars. The aim was to shape and share the process of identifying with and engaging in, SoTL practice. These publications illustrate how collaboration with international scholars creates a vibrant community, enriching the diversity of perspectives and offering invaluable insights, particularly to colleagues new to SoTL, from varied socio-cultural backgrounds. Deliberately including a range of voices and experiences contributes to a more comprehensive and inclusive understanding of SoTL practices. This addresses a literature gap, underscoring the importance of cultural diversity and collaboration in advancing SoTL. Our work holds particular significance within the SoTL framework, directly responding to ISSOTL GCs outlined by Scharff *et al.* (2023). Here, we apply theory in new ways (Lieff *et al.,* 2012) to consider the complexities of teaching and learning identities. By engaging in critical discourse, we shed light on existing gaps and challenges, offering insights that significantly contribute to SoTL's ongoing evolution. The unique contribution lies in the scholarly content and providing solidarity to scholars grappling with their identity within the SoTL realm, thereby reframing and refocussing the SoTL literature.
Disciplinary	Abrahamson and Mann, 2018; Abrahamson *et al.,* 2019 and Eady *et al.,* 2021	These publications have directed the design of the UG STC by both building knowledge through careful investigation of student partnerships, such as PM and LLL and filling a literature gap around academic writing and

Dimension	Article/s	Contribution to Knowledge
		feedback. Their impact goes beyond just one university, especially when considered alongside my textbooks on sports therapy and anatomy (written from a student learning perspective and not included in this thesis), offering concrete examples of how research findings have reached and influenced various educational settings. Placing these insights into student-focussed educational materials extends their impact to how students across different institutions and disciplines experience learning. This broader reach highlights the work's significance and emphasises its transformative role in sports therapy education on a national and potentially global scale. SoTL in sports therapy relies on promoting participation by supporting students to apply clinical knowledge in practice through, for example, simulation, innovation and roleplay activities. This differs, in part, from other disciplines where the focus is on connecting theory to practice. The paucity of SoTL research in sports therapy has enabled knowledge contribution through embedding SoTL principles into the design of the UG curriculum and investigating the impact of PM and feedback in supporting student learning and professional development. My contribution here specifically focusses on the scholarship of integration—searching and bringing together disparate literatures and practices into a cohesive whole (Hamon and Smith, 2014), a skill of central importance in SoTL. Additionally, through the submissions, I relate the intersection of SoTL and sports therapy disciplinary scholarship (e.g. work-life issues).
Developmental	Abrahamson 2022	This reflective article, based on 10 years of SoTL editorial review, illustrates how I use my experience and personal journey to support the manuscript review for a leading SoTL journal. In reviewing a range of manuscripts from international scholars, some more experienced and others new to SoTL, I have refined my own SoTL approach by considering how different methodologies, ontologies and epistemologies are applied to SoTL inquiry. This has further enabled me to provide meaningful and reflective feedback to authors on the design of their SoTL inquiry, contributing to an enriched publication. This improves and transforms insights into teaching-learning interactions, leading to a richer understanding of some dichotomies

Dimension	Article/s	Contribution to Knowledge
		emerging from qualitative responses. It also enables a deeper understanding of what works (or does not) within and between the disciplines.

Appendix 4: Submitted Publications

Publication 1

Simmons, N., Abrahamson, E., Deshler, J. M., Kensington-Miller, B., Manarin, K., Morón-García, S., and Renc-Roe, J. (2013). Conflicts and configurations in a liminal space: SoTL scholars' identity development. *Teaching and Learning Inquiry*, *1*(2), 9- 21.

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Conflicts and Configurations in a Liminal Space: SoTL Scholars' Identity Development

ABSTRACT

Although academic identity has received attention in the literature, there have been few attempts to understand the influence on identity from engagement with the Scholarship of Teaching and Learning (SoTL). In this paper, we (a group of eight scholars from five different countries) describe how our interactions with SoTL have impacted the shaping of our academic identities. We have struggled to define the value, purpose, outcomes, and meanings of being a disciplined SoTL scholar, sometimes in addition to and sometimes in opposition to being a disciplinary scholar. Through analysis of our own 100-word reflective narratives, we identify common conflicts and configurations around our experiences of developing a SoTL identity. We describe how navigating among conflicting identities can lead us into a troublesome but deeply reflective liminal space, prompting profound realizations and the reconstruction of academic identity. Drawing on this notion of liminality helps us to understand our journeys as moving through a necessary and important transformational landscape, and allows us to suggest ways to support those engaging with SoTL to develop an integrative SoTL identity.

KEYWORDS

academic identity, Scholarship of Teaching and Learning (SoTL), liminality, troublesome knowledge

SOTL SCHOLARS' IDENTITY: INTRODUCTION

An increasingly expansive body of literature explores academic identity development (Åkerlind, 2005; Bath & Smith, 2004; Clegg, 2008; Fanghanel & Trowler, 2008; Janke & Colbeck, 2008; Jawitz, 2007; Land, 2001; Simmons, 2011; Trowler & Knight, 2000).[1] There have been, however, few attempts to explore the influence of engagement with the Scholarship of Teaching and Learning (SoTL) on academic identity. In this article, we consider how involvement with SoTL has impacted our various academic identities as

teachers, academic developers, students, and scholars. We go beyond previous writings describing the process of negotiating a SoTL identity (Huber, 2005; Kelly, Nesbit, & Oliver, 2012; Tremonte, 2011) to analyse common elements of our experience and to draw on Meyer and Land's (2005) notion of liminality to apply to SoTL identity development. We describe how navigating among conflicting identities can lead us into a troublesome but deeply reflective liminal space, prompting profound realizations and the reconstruction of our academic identities.

As SoTL scholars from different backgrounds, we have reflected individually and collaboratively on how we negotiated, and continue to negotiate, our numerous identities vis-à-vis SoTL. We ask how involvement with SoTL has impacted our various academic identities, what challenges this has presented, and what we have learned that will bear meaning for others. We consider the literature on academic identity before presenting a thematic analysis of our individual reflective narratives regarding SoTL identity development. This suggests a number of similarities in the conflicts and configurations involved in constructing an academic identity for SoTL.

We have struggled to define the value, purpose, outcomes, and meanings of being a disciplined SoTL scholar, sometimes in addition to and sometimes in opposition to being a disciplinary scholar. SoTL has troubled our identities, but has simultaneously led us to new understandings of ourselves. We see this unsettling of identity as inherent to the process of engaging with SoTL and that normalising it as such may be helpful to others. The tensions that arise are to be expected, as is the transformative paradigm shift that can occur as academic identity in SoTL becomes more deeply understood.

ACADEMIC IDENTITY: DISCIPLINED SOTL SCHOLAR VERSUS DISCIPLINARY SCHOLAR

While academic identity can be defined as the meaning one attaches to roles and tasks required within a particular institutional context, it is often seen as disciplinary identity. The disciplines have been characterized as academic tribes marked by particular ways of thinking and acting (Becher, 1989), and a key task for educators is seen as socialising students into disciplinary norms, thus perpetuating a shared sense of disciplinary identity. This sense of identity can be threatened by tensions between disciplinary scholarship and the interdisciplinary arena of SoTL (Huber, 2005; Tremonte, 2011). SoTL has tried to position itself within the disciplines (Healey 2000; Huber & Morreale 2002), and certainly disciplines engage in education-focused scholarship. At the same time, SoTL has explicitly situated itself as a cross-disciplinary conversation, a "'trading zone' among the disciplines" (Huber & Morreale, 2002, p. 19).

Recent theorists have suggested that more fluid metaphors may better represent how academics typically characterize their identity. Brew (2008), for example, suggests that identities are much more permeable than the metaphor of tribes suggests and that academics [re]define themselves as they negotiate among contexts. Brew outlines that such self-reflexive approaches to identity position interdisciplinarity not as "conceptually deviant" (p. 434), but as normal practice whenever disciplinary lines begin to blur. Such approaches allow us to articulate SoTL identities without the language of exceptionalism (Coppola, 2011) or definitions that exclude through tight delineation.

Social identity theory (Tajfel, 2010; Tajfel & Turner, 1979) reconciles these two positions by suggesting that identity is formed through a dynamic, contextually responsive

process of mentally assigning ourselves to social groups depending on which categorisation best supports positive self-concept and self-esteem. According to this theory, we hold multiple social identities and will identify with that which is most salient at any given time. Socialisation into a discipline or community of practice (Wenger, 1998) can provide the type of unambiguous, supportive, and highly salient identity scripts on which it is easy for academics to draw. Engagement with SoTL, however, often means these identity scripts are challenged as we negotiate a new language for interdisciplinary communication, navigate alien epistemologies, methodologies, and concepts or take on a whole new way of looking at the world (Kelly, Nesbit, & Oliver, 2012; Oliver, Nesbit, & Kelly, 2013). Yet a SoTL identity may also be hard to access because deconstructing one's own teaching, wandering outside the sphere of disciplinary expertise, or operating in conditions in which SoTL is devalued can bring uncertainty and a loss of status and may not immediately fit with how we see ourselves. At the same time, some may find comfortable ways of navigating those tensions.

Social identity theory suggests three possible responses when our identity is challenged (Tajfel, 2010; Tajfel & Turner 1979). The first response is to abandon it altogether in favour of an identity that carries a higher status and better supports a positive self-concept. For disciplinary scholars engaging with SoTL, this risks severing important links to the home audience. A second response is for members of each discipline to retreat to their group identity and make comparisons with other disciplines that increase their group's esteem. Such discipline-based SoTL groups protect disciplinary turf but perhaps impede the interdisciplinary communication that is so important to SoTL (Weimer, 2006). The third response is to redefine the characteristics of the threatened group. This involves those who engage with SoTL reworking how they see themselves to reconcile disciplinary and SoTL identities. For example, Little and Green (2012) suggest academic developers frequently reinvent themselves in this way, inhabiting "a persisting liminal location which can foster 'positive, creative' possibilities" (p. 214).

TROUBLESOME KNOWLEDGE AND LIMINALITY

Initially, we felt that threshold concepts would provide a useful framework for our findings. Meyer and Land (2005) describe threshold concepts as discipline-specific "conceptual gateways" (p. 373). Building on Perkins' (1999) description of troublesome knowledge, Meyer and Land argue that "threshold concepts lead not only to transformed thought but to a transfiguration of identity and adoption of an extended discourse" (p. 375). Such concepts bring learners to "the threshold as the entrance into the transformational state of liminality" (p. 380). We felt hard pressed, however, to define exactly what concept was the threshold in our multiple experiences.

What continued to resonate with the group was this notion of liminality. Meyer and Land (2005) contrast liminality with the threshold metaphor, noting that liminality "appears to be a more 'liquid' space, simultaneously transforming and being transformed by the learner as he or she moves through it" (p. 380). The lens of threshold concepts contains the notion that a predetermined path exists—a way through the liminal space to more expert knowledge. Most of us position ourselves as still in this liminal space as we navigate developing our SoTL identities. We confront external tension in terms of our acceptance and position within our discipline-specific scholarship, as explored, for instance, in Huber (2005). This external tension fuels conceptual and affective difficulties

and calls for us to navigate complex boundaries. A more powerful and often hidden tension is internal; engaging with SoTL leads to troubled knowing. It requires us to develop the capacity to become comfortable being in a nexus of discomfort created by SoTL work.

EXPLORING OUR SOTL IDENTITIES: METHOD

This paper is based on mini-narratives of a maximum of 100 words written by each author to describe our individual experiences of developing a SoTL identity. We responded to the prompt of writing about moments of critical insight about our SoTL identities, moments of discomfort, or particularly transformational moments. These narratives were written after the authors collaborated, both online and subsequently face-to-face, as a SoTL Scholar Identity writing group, one of the ISSOTL pre-conference international collaborative writing groups in 2012. The participant authors, who self-selected, comprise a range of experiences and background disciplines and roles (see Table 1).

Two authors took the lead on analysing and thematically coding the narratives using a constant comparison method (Glaser & Strauss, 1967). Initially, all narratives were read as a set for an overview, and then analyzed inductively for patterns of emergent themes (Neuman, 1997) about SoTL identity development as well as individual variations. The analysis focused on identity reconstructions regarding movement into SoTL. Themes were returned to all group members for verification (Lincoln & Guba, 1985).

Table 1. Author Demographics

AUTHOR	COUNTRY	PRIMARY ACADEMIC ROLE	SECONDARY ACADEMIC ROLE	DISCIPLINARY BACKGROUND	YEARS OF SOTL ENGAGEMENT
Nicola	Canada	Faculty member	Academic Developer	Higher & Adult Education	9
Earle	England	Academic Developer	Educational Policy Writer	Sport Science	9
Jessica	U.S.	Faculty member	Graduate Student Developer	Mathematics	5
Barbara	New Zealand	Faculty member	Academic Developer	Mathematics	2
Karen	Canada	Faculty member		English	5
Sue	England	Academic Developer		Education, Languages	5
Carolyn	Canada	PhD Candidate	Instructor	Social Work	3
Joanna	Hungary	Academic Developer		Higher Education	7

LIMINAL IDENTITIES

Key themes that emerged from the data analysis were intrapersonal conflicts of doubt and insecurity, intrapersonal identity reconfigurations, and the role of the SoTL community in building an alternative identity. In this section we expand on each, providing excerpts from our narratives in support of the themes. We chose not to attribute these excerpts, in light of the need for safety associated with the first two themes.

Doubt and Insecurity: Intrapersonal Conflicts

SoTL identity construction can be challenging given the sometimes perceived foreignness of the language, concepts, and methodologies of SoTL. Those of us who are not social scientists perceived a methodological alienation of being asked to do educational or social research:

> *I was accepted into a SoTL residency program (a multi-day introduction to SoTL), and spent three weeks leading up to the first residency reading books about social science methodology and trying to understand introductory statistics.*

These feelings are also present, however, for most of us who are seemingly in SoTL-related disciplines, and may persist even when, to external eyes, we appear quite successful as SoTL scholars:

> *While I have published in SoTL and presented at SoTL conferences I don't know if I can claim to 'be' SoTL in even a small part of me. I love my SoTL-esque research but I've read the definitions of SoTL a hundred times and I can't see where my interest . . . fits.*

Doing SoTL work means developing different conventions of research and questioning the conventions of our own home disciplines as well as what SoTL is. Whilst these issues may be variously resolved after a time, they point to an ongoing identity struggle as we construe the work we do as SoTL scholars in relation to our disciplinary scholarship.

This has led some of us to write stories of insecurity and risk about entering this unfamiliar territory of SoTL and has generated feelings of being once again a novice, complete with multiple identity crises and self-doubts. One of us noted,

> *I am still figuring out how SoTL fits my disciplinary identity . . . . After 16 years . . . I'm nearly at a point of having some academic credibility and a PhD in my discipline. I'm not sure I can face starting again with another discipline and another literature.*

Entering SoTL thus requires us to reconstruct our identities, considering both new and established academic selves, often triggering feelings of being an imposter (Brookfield, 1990). This is particularly challenging for those of us who are still developing our sense of belonging in the main academic discipline. One author reflected,

> *Developing my own academic identity moving from teacher to student and back again, always aware of what I don't know!. . . . Following a need to seek meaning and work through misconceptions; others seem less worried.*

Many of our stories give voice to continuous strong feelings of self-questioning, discomfort, and risk taking, and even self-denial or hiding this identity in specific disciplinary contexts. For example, one of us reflected,

> *My fear of identifying as a SoTL scholar permeates my professional role in hiding the fact that I am SoTL-focused when working within a discipline-specific role. This fear retards my ability to engage positively in good practice and promote the value of good practice.*

Our narratives articulate our experienced difficulty and doubt and reveal the amount of internal work necessary to construct a SoTL scholar out of a (partially) constructed academic self.

Developing SoTL Identity: Intrapersonal Configurations

There is evidence in all our narratives that meaningful accommodation and assimilation of the conflicting identities occurs over time. This often takes the form of a profound self-realisation, suggesting crossing an identity threshold. For some of us this process happened through a sudden moment of achieving a new understanding of SoTL itself. This enabled our academic or professional self to re-assert itself in the context of SoTL work. For example, one of us mused,

> *After two sleepless nights at the residency, feeling overwhelmed and inadequate, I suddenly realized that I didn't have to become a social scientist, that I could use my disciplinary skills . . . . I read texts and look for patterns; I can do that with texts demonstrating student learning.*

Such critical moment narratives show the synergetic aspect of SoTL with our own disciplinary identity.

For most of us, the potential for a configuration of a new identity occurs when SoTL work makes possible a meta-analysis of our research activity as scholars. This often means realizing an alternative source of academic/research identity than the discipline itself. One author noted,

> *While working with academics from all disciplines a critical moment came when I realized that it wasn't the discipline I needed as my research platform, but an overarching theme that would incorporate all my research ideas regardless of discipline.*

Our work as SoTL scholars thus moves us into a new, interdisciplinary field of research and practice. Another of us said,

> *I've been reading and I've understood . . . that what makes SoTL stronger is this ability to move across the disciplines . . . or apply approaches different to those traditionally used in your discipline.*

SoTL becomes understood as an expansive or inclusive form of academic research and academic work, for some, a new way of being an academic. One author described this shift,

> *I've started to realize that the educational research I do can be described as SoTL . . . and that I can continue to develop as a researcher; I need not concern myself with how others might classify my work but with where I think it fits.*

The SoTL self-construction allows us to pull together different aspects of our academic identity into a unified whole. For example,

> *Being engaged in SoTL . . . has allowed me to link together various threads that run through my biography—my obsession with higher education itself, some pervasive methodological and thematic orientations, the need to do academic work across disciplinary borders and with real people.*

These moments of self-realisation allow us to take up a new perspective on all of our academic work. This view is apparent in one author's reflection that

> *As an academic, it is difficult to separate the work that I do from the person that I am. I consider myself a disciplined academic engaged with disciplinary and SoTL scholarship . . . . Being a SoTL practitioner dictates a position wherein I can continue with scholarship, and embed good practice into a range of papers and topics.*

Whether generated by a sudden realisation or over a longer period of self-questioning and analysis, what these narratives show is how SoTL forms a hybrid, fluid, and productive identity, one that allows us to come up with alternative configurations of our educational biography.

The Role of SoTL Community in Building an Alternative Identity: Interpersonal Configurations

We have all benefited significantly from the support of our alternative academic community of SoTL colleagues as we stepped over the threshold to this new identity formation. This, to different degrees, has allowed us to navigate how we then relate SoTL to our homes in the disciplines. One of us mused,

> *At the end of a SoTL residency I realize I have found an academic community, but still have to go home to my department, a different sort of community. Three years later, I inhabit both.*

SoTL becomes a second home that allows us to maintain a sense of self worth where otherwise we might have faced criticism. Another author found,

> *On my return to a faculty I found less focus on improving practice than building theory. I continue to juggle: SoTL, they say, is not real research . . . thank goodness for SoTL colleagues in other disciplines.*

The interdisciplinary nature of SoTL may be seen as one of its welcoming aspects:

> *I also found the interdisciplinary space I enjoyed as an academic developer and in which I most love to work.*

Our identity construction builds on our inter-subjective recognition from SoTL colleagues. Indeed for some of us, it was the moment of engaging in collaborative work with other SoTL colleagues that allowed us to resolve some of the internal conflicts over our identity formation. One of us reflected that

> *Coming back from ISSOTL . . . feeling really fired up and feeling more like that SoTL scholar I was unsure I was!*

In some cases, these resolutions had the flavour of significant paradigm shifts:

> *It was during this interaction . . . that I slowly became aware of what SoTL does, as opposed to what it is . . . the SoTL interaction moved me to a new way of thinking and doing.*

Conversations with other SoTL scholars allowed us to become aware of possibilities for building new identity configurations. Engaging in a SoTL community was experienced as a support to shaping our practices as well as our identities.

For others, SoTL as a community has long been an alternative site of developing mentoring relationships that sustain us as professionals in new and unfamiliar fields of practice in contexts where these fields are not adequately supported, either intellectually or materially. One author explains,

> *It was through working with SoTL that I became an academic developer, in a place where no one identified as such. . . . I learnt the milestones of developing a SoTL identity by observing my scholars whilst the SoTL community has been my professional reference point and a source of significant mentors for my own development.*

It was this aspect of SoTL as a productive field of self-realisation that allowed integration of SoTL into an academic self through the sense of belonging in a clearly defined community. The ISSOTL conference was seen as a particular support:

> *Colleagues encouraged attendance at early ISSOTL conferences and here I found an intellectual home, having always inquired into my teaching.*

These realizations point to how SoTL serves as a location for integrating multiple, conflicting, and interdisciplinary areas of academic work.

SWIMMING IN THE LIMINAL SEA

We recognized from our own experiences and our knowledge of identity development literature that identity construction does not happen in a vacuum within the self but rather in interplay with one's peers and the larger context one inhabits (Lave & Wenger, 1991). Trowler and Knight (2000), amongst others, outline the process of acclimatization into department cultures, including the challenges of role resolution that occur as one's own approach intersects with the established norms of the department culture (Jawitz, 2007). Peers and their beliefs and values can thus be both supports in the socialization process and hindrances as one accommodates to their approaches.

While our narratives examined the notion of becoming SoTL scholars, one of the challenges is that SoTL as a culture is still constructing itself, and it may be difficult for newcomers to identify what it means to think as a SoTLer. As Jawitz (2007) notes, those who enter an academic field bring their own perspectives, which then influence the cultural norms of that field. In the case of SoTL, which could be said to still be in its adolescence (identity formed, but still challenging what it wants to be when it grows up), this can be both wonderfully supportive, as newcomers can truly add to the crafting of that identity, and also challenging, as it may be doubly difficult to get a strong sense of the cultural norms of engaging with SoTL.

For each of us, construing a SoTL academic identity has proved troublesome in one way or another, giving rise to conflicts, discomfort, risk-taking, and transformative and integrative experiences. This includes one person whose initial entry to SoTL felt seamless; even she has subsequently encountered challenges to academic identity vis-à-vis SoTL work. Seeing academic identity through the lens of troublesome knowledge and liminality helps us to understand our journeys as moving through a necessary and im-

portant transformational landscape. It alerts us to the possibility of transformative moments or paradigm shifts along the way, although these cannot necessarily be anticipated along a linear path.

Addressing our SoTL identity causes us to recognize that becoming comfortable in our identities may not be our ultimate goal. Indeed, we note that identity is a problematic subject with cognitive and affective dimensions (Kegan, 1982), including not only epistemological issues of knowing but also intrapersonal and interpersonal spheres (Baxter Magolda, 1999), with various personal tensions that must be resolved as individuals move through developmental stages (Kegan, 1982). Our goal is thus to learn to be comfortable in the discomforting spaces we currently inhabit. While our areas of doubt are almost never resolved, we can develop new, hybrid, multiple, or alternative identities that enable us to integrate SoTL into our academic lives. By adopting an integrative identity script, we can redefine ourselves so we neither abandon our pre-SoTL academic identities altogether nor cling to them so closely we miss opportunities for interdisciplinary dialogue and personal transformation.

In the process of redefinition, we are supported by various configurations of a SoTL community conceived as an alternative academic home or support network. The SoTL community makes a SoTL identity more salient by giving it value, reinforcing it, and helping us see how we might use it. As our SoTL identities are not equally valued in all the communities we inhabit, we are creative, self-reflexive, and careful about how we use or share these new and alternative identities, and we look to the broader SoTL community for our SoTL identities to be supported.

There are, of course, limitations to our work. We are but a small group of eight; furthermore, we self-selected to participate in the ISSOTL international writing group on SoTL Scholar Identity. We came to this study, therefore, not as outsider researchers, but rather as academics living the experience of constructing our SoTL identities. Our perspectives reflect both our interests and experiences, and should not be assumed to be shared by all. At the same time, there are indications that the three themes we have identified reflect the experiences of some other scholars engaging with SoTL (Oliver, Nesbit, & Kelly, 2013). Despite our varied backgrounds, what have been most compelling to us have been the similarities in our experiences along with the extraordinary support we have found amongst our group members as we discussed swimming the liminal sea.

FURTHER THOUGHTS

Examining academic identity through the lens of troublesome knowledge and liminality points us towards new ways in which the SoTL community can provide support. Land, Cousin, Meyer, and Davies (2005) suggest educators design a carefully sequenced "framework of engagement" offering multiple opportunities to engage recursively with, and gain new ways of thinking about, the troublesome threshold concept. This raises the question of how we can more explicitly structure opportunities for SoTL scholars to consider their academic identity. Whether this be formalised through SoTL curricula or informally in the way we run our conferences, we should perhaps consider expanding opportunities for participants to engage with the question of what it means to be in SoTL. More discussion of the many ways one can be a SoTL scholar may help us to grasp what Land et al. (2005) call the "underlying game" (p. 56).

Land et al. (2005) also suggest acknowledging the extent of pre-liminal variation.

For example, Savin-Baden (2012) advises that "what occurs for [individuals encountering a threshold] is not just 'variation' but different ways of managing the disjunction being experienced" (p. 163). More research is needed to understand the different identities and aspirations we bring to engagement with SoTL and how these affect the evolution of academic identity. Another area for exploration is how to further develop the considerable capacity of the SoTL community to be a "supportive liminal environment" (Land et al., 2005, p. 58), within which new learning can take place and identity struggles might be safely navigated. Finally, Land et al. discuss the importance of acknowledging the discomfort involved in wrestling with a threshold concept and moving through the liminal space, and of reinforcing the metacognitive capacity to tolerate uncertainty.

LIMINAL SCHOLARS

When we began discussing our ideas for this paper, we grappled at length with the term "SoTL scholar." While we drew on Boyer's (1990) idea of scholarship of teaching as an important part of academic work, there were also concerns that not everyone in the group was a scholar according to notions of going public (Healey, 2003). If some of us drew on the literature instead of contributing to it, were we practitioners rather than scholars? We have since come to the realisation that the very conversations we had along the way, in and of themselves, made our reflections public to our peers; this paper is an extension of those conversations and an invitation to further conversations. While we acknowledge the limitations of working with personal accounts from our small group of eight, we hope that this paper contributes to understanding aspects of developing a SoTL identity, not least by offering some solidarity to others who are negotiating what it means to be a SoTL scholar. Academic identity in SoTL may certainly be troublesome, but the reward for continuing to wrestle with it can be transformative.

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NOTES

1. We were privileged to participate in a collaborative international writing group prior to the 2012 ISSOTL conference. We engaged with SoTL debate and discourse, but more importantly, reflective analysis of what SoTL does, and how it moves individuals to tackle new and different directions in teaching and learning research. We are grateful to have had this experience that generated not only this paper, but our ongoing reflections and continuing scholarly partnership.

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Troublesome Knowledge of SoTL

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Troublesome Knowledge of SoTL

Abstract
This study explores the Scholarship of Teaching and Learning (SoTL) as a form of troublesome knowledge (Perkins 1999) that continues to trouble its practitioners. Forty-eight higher education professionals from six countries described their understanding of SoTL in an online survey; ten individuals participated in follow-up interviews to consider how SoTL experiences shape, support, or hinder academic identity and knowing. We categorize our findings according to the dynamic factors—personal, relational, and contextual—identified by Lieff et al (2012); we argue that SoTL serves to illuminate and expose tensions created by competing values and that these values can lead to, or create, a troublesome space wherein promoting SoTL can be enabling and disabling.

Keywords
higher education, academic identity, troublesome knowledge, scholarship of teaching and learning

Troublesome Knowledge of SoTL

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This study explores the Scholarship of Teaching and Learning (SoTL) as a form of troublesome knowledge (Perkins 1999) that continues to trouble its practitioners. Forty-eight higher education professionals from six countries described their understanding of SoTL in an online survey; ten individuals participated in follow-up interviews to consider how SoTL experiences shape, support, or hinder academic identity and knowing. We categorize our findings according to the dynamic factors—personal, relational, and contextual—identified by Lieff et al (2012); we argue that SoTL serves to illuminate and expose tensions created by competing values and that these values can lead to, or create, a troublesome space wherein promoting SoTL can be enabling and disabling.

INTRODUCTION

While the scholarship of teaching and learning (SoTL) is an emerging field of inquiry in higher education and has received increased attention in the literature, there is much debate around the definition of SoTL and how topics in SoTL need to be investigated and evidenced (Shulman 1999; Prosser and Trigwell 1999; Hutchings 2000; Kreber 2002; McKinney 2007; Felten 2013). Research into SoTL has revealed that the questions we ask, or fail to ask, as researchers influence the shape and form of SoTL output (Gurung, Chick and Haynie 2008; Kreber 2013). McKinney (2015) recently suggested that the field itself has become stalled in these definitional debates. Felten (2013) has argued that despite, or indeed because of, the multiple definitions of SoTL, several principles need to underpin SoTL inquiry: it is 1) inquiry into student learning, (2) grounded in context, (3) methodologically sound, (4) conducted in partnership with students, and (5) appropriately public. Fanghanel (2013) attempted to shift the terms of the debate by arguing that the definition of SoTL is less important than what it can do and what it has become. That is, SoTL has the potential to become a vehicle for transition, inquiry, and growth, working between disciplines and sharing a common practice.

Higher education professionals who self-identify as producing or consuming SoTL literature, however, continue to identify tension within this practice. Indeed, even the obsession with definitions indicates that many individuals interested in the field find SoTL troublesome, though the particular nature of the trouble likely varies depending on factors like disciplinary, institutional and national contexts. SoTL is often framed as a North American phenomenon although gatherings like EuroSoTL are bridging some of these boundaries, enabling practitioners to further discuss barriers and opportunities for continuing scholarly activity within a SoTL framework (Abrahamson 2015). Still, the term SoTL itself may be alien and so may present individuals with troublesome understandings about their own practice. Arguing for a pragmatic approach to constructivism, Perkins (1999) identified variations of troublesome knowledge. Perkins (2012) later suggested that some epistemes may be troublesome.

In this paper we probe the troublesome nature of SoTL more deeply by exploring different domains of academic identity, through reflection and reflective practice in order to assess how these constructs interact and/or interfere with each other. This more nuanced description of how SoTL troubles its practitioners may help individuals cope with the anxiety and doubt that accompany epistemic shifts. After all, as Schön (2001) notes, naming and framing are crucial parts of critical reflection and reflective practices. Reflection enables practitioners to consider the components of their beliefs and work towards different understandings within their academic roles and identities. However, as Moon (1999) illustrated, reflection is remarkably complex given variations in definition, experience, purpose, and context. This paper explores higher education professionals' reflections upon SoTL, hoping to contribute to a dialogue around the value, and valuing, of SoTL. We argue that while study participants valued SoTL cognitively and affectively, they also identified competing values both in terms of disciplinary practices and institutional demands.

In this examination we build on work around SoTL and threshold concepts developed with Simmons et al (2013). From a social identity theory perspective (Tajfel 2010), Simmons et al. (2013) examined how SoTL affects the formation of academic identities through the creation of a reflective liminal space. Meyer and Land (2005) described such a space as liquid, "simultaneously transforming and being transformed by the learner as he or she moves through it" (p. 380). Transformation is one defining feature of a threshold concept as "threshold concepts lead not only to transformed thought but to a transfiguration of identity and adoption of an extended discourse" (Meyer and Land, 2005, 375). Threshold concepts are often described as a step into a new way of knowing where the troublesomeness dissolves. The faculty member is positioned as disciplinary expert looking back at or, perhaps more accurately, retrospectively imagining a state before knowledge from the other side (MacLean 2009). However, Simmons et al. (2013) did not identify a specific concept that marked a transition to SoTL practitioner. Rather, SoTL was seen as troublesome knowledge that continues to trouble practitioners.

This paper explores the troublesome nature of SoTL further. Motivated by an interest in how academics choose to portray their identity, we draw on data from an on-line survey and semi-structured interviews to consider how SoTL experiences shape, support, or hinder academic identity and knowing. How do self-identified SoTL practitioners describe SoTL and academic identity? How do these descriptions differ from the established literature and research on SoTL? We categorize our findings according to the dynamic factors—personal, relational, and contextual—identified by Lieff et al (2012); we argue that SoTL serves to illuminate and expose tensions created by competing values and that these values can lead to, or create, a troublesome space wherein promoting SoTL can be both enabling and disabling.

METHOD

Forty-two higher education professionals in six countries (Australia, Canada, Norway, South Africa, the United Kingdom, and the United States) participated in an online survey distributed through a variety of higher education list-servs; thirty-four participants (81%) were from North America. The preface identified the survey as gathering "information on academic experiences around the Scholarship of Teaching and Learning (SoTL), including challenges, opportunities, and identity." Thus, people taking the survey were likely already involved in some capacity with SoTL. Twenty-eight were in teaching-focused roles, another eight described their work as academic or faculty development, four had primarily administrative roles at the dean or director level, and there were two other participants. In a series of open-ended questions, participants were asked to describe their academic identities by emphasizing main areas of work and recognition; the survey questions are provided in the appendix. They were asked about their understanding of SoTL and their work in relationship to SoTL. They were also asked about disciplinary and institutional support/obstacles of SoTL. The survey provided individuals with the option of volunteering for a follow-up interview. Ten individuals participated in semi-structured interviews to delve deeper into questions about synergies and conflicts in the different parts of their academic identities. One interviewee was from the UK; the rest were from North America. We used the survey responses as prompts during the interviews. The survey questions and interview structure were reviewed and approved by the Mount Royal University Human Research Ethics Board and the University of East London Research Ethics Committee. All interview responses were recorded and transcribed. Participants were asked to review and check the transcripts for accuracy. Participants were made aware that participation was voluntary and that they had the right to withdraw from the study.

Analysis

We began by reading through the survey answers, looking both for recurring patterns and variations from patterns. When asked about the relationships between academic and SoTL identities, the majority of our respondents claimed that there was no difference or described the identities as blended or intertwined. The majority of respondents also said there was at least verbal, if not monetary, support for SoTL at their institutions; however, most also identified tension between discipline and SoTL activities. Indeed, only 13 of 42 (31%) said there was no tension, sometimes framed as "not for me" or "not in this role," frames that acknowledge tension exists for others. Yet if there is institutional support, at least in name, where is this tension coming from? One recurring theme not specific to SoTL involves workload and time. A number of participants, however, identified bias against SoTL in their academic contexts. One participant called it the "ugly step-sister of the academic family." Sometimes the bias is seen as disciplinary-based, sometimes methodological. The tension is often framed in terms of values, including the relative value of SoTL publication as currency in the academy. SoTL is widely perceived to "count less" than other types of scholarly publication for tenure and promotion. Other participants talked about their colleagues' reactions to SoTL.

We were able to probe some of these tensions and relationships more deeply in the ten semi-structured interviews. Here we used a form of template analysis as we coded transcripts, identifying themes. King (2004) describes template analysis as a set of techniques for thematically organizing data. Some of the themes can be a priori though modified and interpreted by the researchers. We coded the same data independently, meeting to share our interpretations, reflect on the process, and develop our themes further. As we worked through the interviews, we found the framework described by Lieff et al. (2012) helpful. Lieff and colleagues examined the academic identity formation of participants within a faculty development program. They identified three dynamic domains: personal; relational; and contextual. In terms of our specific context, these domains can be represented as follows:

Domain	Descriptors	Examples from Interviews
Personal	Cognitive and Emotional factors Perceptions of capabilities Interpretation of actions Impact of prior experience Management of competing identities	"the scholarship of teaching and learning is the way I live, how much I care about my students and how much I care about improving practices for my students."
Relational	Connection and Interconnection with others Sense of Belonging Comparison to others Perceptions of others	"I hadn't appreciated that my colleagues were not as excited about understanding the teaching methods that would be useful to enhancing learning practices."
Contextual	Curricular content Work environment	"I think in many disciplines you would have trouble getting tenured if you only did the scholarship of teaching and learning"

As the interview participants described their academic identities in terms of SoTL, these three domains were so closely intertwined that multiple codes were often appropriate. In many of the interviews, the idea of SoTL had the potential to disrupt the contextual, relational and/or personal domains. Such disruption could be positive or negative for the individual. Areas of disruption included conflicting valuations of SoTL.

The Value of SoTL

Many of the interviewees described what can be identified as conflicts between the personal, relational and contextual domains in terms of the value of SoTL. Most attributed a high value to SoTL activities; however, they described conflicts in relational and contextual domains where SoTL was not valued as highly. One interviewee, working in the area of teacher education in the UK, was unfamiliar with the term and acronym; it was not part of his institutional or disciplinary context. When the term was reframed as "teaching and learning improvement," his responses were consistent with the other interviewees. All described their involvement with SoTL in positive, action-oriented terms. They said things like:

> "For me personally it was a paradigm shift. All the emotions that come with that i.e. the joys of teaching, the emotions, the frustrations - all of that just tended to be the focus of the scholarship and teaching and learning work that I was engaged with at that time. And what I learnt is that the way that I teach is not always about me; it's about my students and the way that they learn. So the scholarship of teaching and learning for me is how I

embody loving the work that I do."

Participating in SoTL profoundly changed the way this participant thinks about education, a sentiment other SoTL practitioners have shared (West 2013; Goel, 2012). This paradigm shift involves affect in both the personal and relational domains. Many of our participants talked about the value of SoTL in affective terms. One participant speculated that valuing SoTL might be a threshold in itself that is difficult to cross. Another participant talked about the bottlenecks she felt as a SoTL novice--the anxiety of becoming a scholar in another field. One participant described himself as suffering from imposter syndrome. However, they all valued SoTL even with these emotional costs.

They sometimes felt troubled by other people's valuation of SoTL as expressed in grant dollars and publication reputation. For example, one participant described SoTL as "a form of action research. . . We are doing this research not only to find out what is happening and why it is happening, but to change what is happening." In this participant's institution, however, SoTL publication counts as teaching, not as research, as "bringing outside dollars . . . is what matters." This concern with grant money showed up multiple times in the interviews as participants described the struggles to fund this sort of research. Perhaps this is why one participant suggested reframing the discussion as "best practices for teaching and learning within the discipline as opposed to simply thinking about it as the scholarship of teaching and learning which at times may become an alienated term." SoTL may be seen as alienating in a competitive environment with limited resources for research and scholarship.

Participants did not for the most part subscribe to this dichotomy between SoTL and the discipline. Some participants described their disciplines impacting their SoTL work. As one participant observed, "There is no question that we are educated in a way to perform research within our own areas of study." Others described SoTL as changing their understanding of their disciplines:

> "what I think is important about my disciplinary research has changed. And SoTL has really led me to the question of the valuation of different kinds of scholarship within the academy … it has shifted my activity away from interest in monographs, for example, which I think are a self-indulgence that we have sort of allowed ourselves and that we talk to each other … and I also think it has sort of freed me up to think about my disciplinary work differently."

This participant went on to identify the larger questions animating her SoTL work, her disciplinary scholarship, and her classroom practices. SoTL allowed participants to learn more about their disciplines, ask questions about the value of their disciplinary work, and challenge assumptions about the norms of the academy.

The discipline remained important to most, though not all, participants even when the participant had moved on to other roles within the academy. As one respondent noted, SoTL is valued within the academy only if it has "truth" in relation to the discipline: "the central discourse is disciplinary." This comment was made in relation to the practices of tenure and promotion committees, typically organized by discipline, but it also connects back to the action-oriented nature of SoTL research. Another participant described the relationship between SoTL and the discipline in these terms: "SoTL is part of what I do in order to do what I do [to make] the classroom better but is not what I do and maybe this is the reason why SoTL is external to the discipline. SoTL is about learning … how to learn." SoTL serves the discipline, but as in many "service areas" in the academy, practitioners may struggle with competing visions of education.

Competing Visions

These competing visions of education are played out at both the disciplinary and institutional levels and involve competing values. One participant described her realization that her colleagues,

> "did not really focus on the scholarship of teaching and learning and simply taught. They were not too concerned with improving or enhancing their own practice in the classroom. Their task was to ensure that students completed a course of study."

The participant is concerned with how to improve teaching practices to enhance student learning; the colleagues are concerned with completion of a course of study. Institutionally and within academic units, metrics like attrition rates and time to degree are important. The participant's concern with enhancing practice in the classroom may rub against, even if it does not directly compete with, these other concerns. Another participant identified conflict between "what [she] was and where [she] was heading in terms of scholarship of teaching and learning" because of the different administrative demands: "I was involved a lot in administrative work and committee work which was not in the best interest for my students. It was in the best interest of the budget but not my students." This tension between competing demands in higher education contexts is not unique to those involved with SoTL; indeed, almost everyone involved in higher education today recognizes a gap between the resources we have and the resources we need for quality education. However, SoTL, with its focus on student learning, may make the gap more visible.

Perhaps these competing visions of education are why SoTL can be officially valued, but marginalized. For example, one participant claimed that "SoTL was successful 20-30 years ago, but does not carry weight in terms of tenure and promotion;" another participant described SoTL as,

> "Mostly failure. I don't think that it is as widely recognized in the academic community as it should be. I think that it is … that scholarship of teaching and learning is reluctantly accepted by some. I think that institutionally is something everybody agrees with and nobody bothers about."

SoTL occupies a liminal space within the academy, both officially endorsed and dismissed.

SoTL as Prism

What then of the individual who is heavily invested in the liminal space of SoTL? Participants described how participation in SoTL caused paradigm shifts, but the academy and the disciplines have not shifted along with them. In these circumstances, SoTL may

serve as a prism, allowing participants to see, not only aspects of student learning, but other aspects of their higher education contexts differently. This altered vision may be described in positive terms, as with the participant who described SoTL as "having a little Gem with different facets," each facet illuminating a different aspect of practice. But for some participants, it can lead to troubling realizations: "the real dilemma that for many of us may be coming out of SoTL, and that is for years we have been told there are easy ways to help students learn and I don't think that is true; there are no easy ways." In higher education contexts that seek the latest, quickest, cheapest "solution," SoTL may reveal our failures. Another participant talked about the importance of recognizing and trying to learn from failure: "maybe that is what the scholarship of teaching and learning is at this particular point in time." It is unclear from the context if he was referring to the failure of higher education as illuminated by SoTL or the failure of SoTL as a movement to affect change or, perhaps, both. SoTL figured as a prism contains the possibility of seeing new elements of our teaching and learning contexts. However, a prism does not refract all light; some is reflected in a slightly altered trajectory from before. Savin-Baden (2012) suggests that when encountering a "troublesome learning space," individuals manage disjunction in different ways including retreat, temporizing, avoidance, and engagement. She argues that "Troublesome identities are evident when challenges to personal beliefs about learning have occurred and have then promoted some kind of personal shift" (167). SoTL does not necessarily change our personal, relational or contextual domains; it might change our perceptions of these domains.

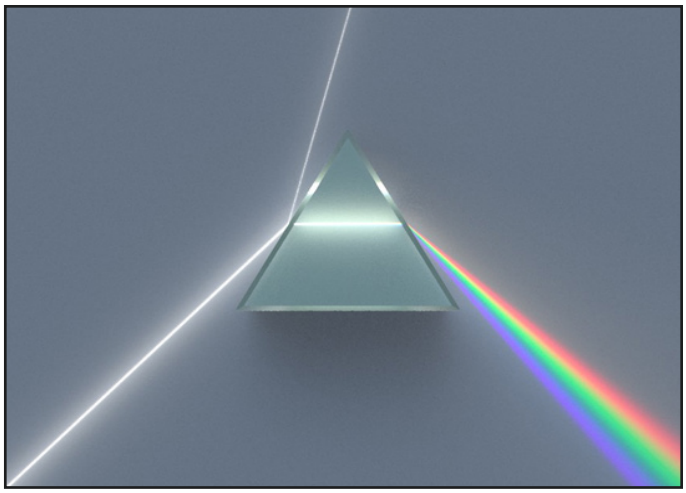

Figure 1: Dispersive Prism Illustration by Spigget.jpg, modified by Ceipheden

One limitation of this study is that our participants, for the most part, self-identified as SoTL practitioners. We do not know whether those who don't identify as SoTL practitioners value SoTL. Are they even aware of it? If they are aware, do they find SoTL troublesome? Would they be inhibited by the label? Does the prism obscure? Further studies could take up these questions particularly in higher educational contexts outside of North America.

CONCLUSION

This study examined personal, relational, and contextual domains of SoTL practitioners to consider SoTL as troublesome knowledge. Participants valued SoTL cognitively and affectively; however, their positive valuation of SoTL was troubled by several factors in relational and contextual domains. They identified competing visions of education both in terms of disciplinary practices and institutional demands. We suggest that SoTL may act as a prism, making already existing contradictions in higher education more visible. SoTL may indeed have the power to "make knowledge visible," to echo a phrase familiar to many SoTL practitioners, but that knowledge may be troublesome. Recognizing dynamic domains may provide SoTL practitioners with language they can use to frame their own troublesome encounters with competing values in higher education contexts.

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Appendix One: Survey on SoTL

The link to an online survey was distributed through a variety of list-servs. The survey itself was administered through TooFAST, free software housed on a Canadian server: www.toofast.ca. We provided the following preamble and questions. For each open-ended question, participants could use an unlimited number of characters. Some answered briefly; some described their experience at length.

Dear Colleague,

Thank you for your co-operation and willingness to complete this survey. The aim of the survey is to gather information on academic experiences around the Scholarship of Teaching and Learning (SoTL), including challenges, opportunities, and identity. The information gathered will be used to consider knowledge and knowing within a SoTL framework. The majority of questions require short answers and explanations. In any dissemination, we will ensure that you cannot be identified by the information provided.
Please answer the questions as honestly and reflectively as possible. All questions have been reviewed and approved by the Mount Royal Human Research Ethics Board and the University of East London Research Ethics Committee.

Gender:
Higher Education Institution/ Country:
Academic Title:
Academic Discipline:
Principal Research Area/s:
In the past two years, have you

Attended any SoTL-specific conferences	Y	N
Presented your work at any SoTL-specific conferences	Y	N
Do you intend to attend any SoTL-specific events or conferences in the future?	Y	N

Could you describe your academic identity by emphasizing your main areas of work and recognition?
What is your understanding of SoTL?
Do you consider your work to be SoTL focused?
What is the relationship between your academic and SoTL identities? Are there distinct differences?
Are there any tensions between your discipline and SoTL research activity?
Does your institution support SoTL development?

We then asked whether the individual would be interested in participating in a short interview (30-45 minutes) to further discuss the issues identified.

Publication 3

Abrahamson, E. D. (2022). The People Behind the Publications: Reflections on a Decade of Reviews. *Teaching and Learning Inquiry*, *10*.

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10th Anniversary Invited Reflections

The People Behind the Publications: Reflections on a Decade of Reviews

ABSTRACT

This article reflects on my personal experience as a TLI reviewer. It draws upon a decade of learning with and from colleagues, and connects the lessons learned from being both a reviewer and producer of SoTL output. I signpost the challenges and opportunities that belie the role of a TLI reviewer and celebrate the success the role brings. Through the role of TLI reviewer, I have learned how to reshape feedback and structure guidance to support the submissions of manuscripts to TLI.

KEYWORDS

review, reflection, developmental feedback

INTRODUCTION

Teaching & Learning Inquiry (TLI) has become synonymous with the Scholarship of Teaching and Learning (SoTL), as a vehicle to inspire discussion, publish meaningful research and enable contribution to SoTL debates. In their inaugural edition of the journal, founding co-editors Nancy Chick and Gary Poole reminded the international SoTL audience that "ultimately, TLI will be a beacon for such high-quality work that includes and even calls attention to both more traditional models and those not traditionally seated at the SoTL 'family table'" (Chick and Poole 2013, 1). Ten years have passed since the inaugural issue, one which set the tone for how we attempt to define, research, and disseminate SoTL.

Ralph Waldo Emerson the famous American essayist, best captured the principles of scholarship when he wrote "scholarship is to be created not by compulsion, but by awakening a pure interest in knowledge." These poignant words resonate with the origins and founding principles of TLI. The journal has connected journeys, challenged intersections, advocated for the benefits of engaging in SoTL but most profoundly, told the stories of the people behind the publications. TLI has taught me to continue my quest into the process and products that SoTL inquiry brings and to be curious and creative in my attempts to dissect the cardinal questions that weave their way into the SoTL tapestry.

So, what have I learned through the TLI lens? What messages has TLI brought me and how has review of manuscripts changed over the decade? These questions form the corpus of my personal reflection that follows.

REFLECTION

When invited to be part of the inaugural TLI editorial board, I recall the excitement and trepidation, the hope and humility, the opportunities yet obstacles, and the understanding of the

importance of the role as reviewer, mentor, and critical friend. These feelings have not changed, but the manner in which I now approach the review process has. I have learned how to value contributions, recognise difference, and enable contributors to develop their thinking and outputs along with the changing landscape of SoTL. For me, the power of the review role rests not with the written but with the reason for contribution. I am curiously interested in the reasons for submitting the manuscript, the personal and collective gains from publication, and the support I could offer to further develop the manuscript.

From my humble beginnings as a reviewer almost a decade ago to the present time, I have learned to read with purpose, to better understand how papers function to narrate and document different research stories within and beyond SoTL. The most exciting aspect has been how authors plan their submission and consider the dynamics of the paper they submit. Over the years I have been fortunate to review submissions from those new to SoTL but equally those who are more experienced. The submissions have built a compendium of learning that embraces a common theme of public SoTL. Through the review process, I have focussed on how to better understand how SoTL is used to tackle interesting, complex, and new insights in higher education. The unique international perspectives have been instrumental in framing the future for SoTL outputs. For me, the greatest learning has been reviewing the methodologies used and considering what methodology/ies best supports the future for SoTL outputs. Many of the manuscripts reviewed choose to use qualitative methodologies. This was interesting yet difficult to initially appreciate. I traditionally use scientific methods that interrogate the analytics and compare numeric values. Reading narratives was useful but equally alien to my research world. I had not yet considered the value of narratives and how SoTL research is central to the person. As I began to delve further into different methodologies used by SoTL researchers, I began to embark on a journey of redefining my questions. I realise I was so obsessed up until this juncture in finding answers, that I almost lost the ability to ask different questions. I learned that individuals engage with SoTL because they genuinely care about making a difference in the lives of those they teach or influence. This was a powerful discovery enabled only through my role of privilege, as a TLI reviewer.

Reviewing for TLI has not been without its problems. Whilst the process is fascinating, insightful, and positive, the commentary and feedback delivered to those who submit needs to be carefully considered. There is little formal training in the art of reviewing. Reviewers are selected on their ability to focus and support contributors and contributions and SoTL expertise is only part of the criteria necessary for successful reviewing of manuscripts. What became increasingly evident for me was that humility is at the heart of the process. Humility represents the ability to understand the person and direct feedback to support and enrich the final product. Humility equally works in making explicit how the manuscript could be improved or repurposed for submission. TLI has worked to develop a framework for supporting reviewers and ensuring that feedback is meaningful and helpful. This has most recently culminated in the Gary Poole Distinguished Reviewer Award, an award that recognises how reviewers impact not only the submission, but the person behind the paper. TLI has taught me how to direct feedback for learning and development and not simply value it as a product of the review. I have learned how to compose feedback so that it reminds the author/s of the purpose of the paper in line with the values of SoTL. TLI has taught me how to question, challenge and interpret the value of SoTL in different contexts and cultures.

One incredible experience was working with a group of international academic staff to develop a SoTL article. All of these academics had experience in producing discipline specific research outputs but

were inexperienced in writing SoTL articles. I supported the group by drawing upon my experience as a TLI reviewer to scaffold the writing process. I particularly used principles of decoding (Pace 2004) to illustrate processes and protocols in making explicit the purpose of the writing and the impact of the interventions. This culminated in successful publication in TLI and sparked an interest in the group in continuing the SoTL journey and thinking more strategically about the value of SoTL in their work. From the success of the publication, the group submitted an abstract, which was accepted, for the 2019 ISSOTL conference and invited me to be a lead part of their panel discussion. I found the experience humbling and used to it to connect my learned with my lived experience of being a SoTL scholar. I firmly believe that TLI gave me the opportunity to develop and hone my mentoring skills; to think carefully about supportive and developmental feedback; and inspire a renewed energy for producing SoTL output. These values have defined my ability to support, communicate, appreciate, and engage communities of practice in pursuit of publications and discussions within SoTL. I realised how my feedback extended beyond the written and opened the eyes of those new to SoTL. I was in awe of how my words to the group enabled a renewed passion for not only what SoTL is, but moreover what is does. TLI cultivates connections and community. It does not dictate perfection but purpose. In listening to the empowering words from "The Hill We Climb" by Amanda Gorman (2021), I realise how the juxtaposition of place, space, and semantics can forge unions beyond the desired purpose: "And, yes, we are far from polished, far from pristine, but that doesn't mean we are striving to form a union that is perfect. We are striving to forge our union with purpose."

CONCLUSION

The past decade for TLI has simply and significantly set the scene for the next one. It has given voice and vision to SoTL and attempted to boldly challenge SoTL's impact and influence. With this foundation we can now begin to build new ideas, ask different questions, and co-construct a journal that is truly inclusive and diverse. The challenge for SoTL remains difficult as we begin to redefine what SoTL is and how it is perceived. We ask not so much about the submission but moreover, about the TLI service. Who will TLI attract to serve as editorial board members moving forward? What types of publication are useful in showcasing the different forms SoTL takes? How do we embrace a multitude of SoTL practice whilst celebrating the narratives that define the publications? I return to the sentiments of Chick and Poole (2013) and question whether TLI has, or will continue to, call attention to both more traditional models and those not traditionally seated at the SoTL "family table."

These questions are somewhat rhetorical but serve to challenge the status quo and further strengthen the pillars of SoTL woven into the fabric of TLI.

AUTHOR BIOGRAPHY

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Publication 4

Abrahamson, E., and Mann, J. (2018). For whom is the feedback intended? A student-focused critical analysis of Turnitin software as a tool for learning. *Journal of Pedagogical Research*, *2*(3), 146-166.

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For whom is the feedback intended? A student-focused critical analysis of turnitin software as a tool for learning

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Abstract

Online systems like Turnitin have been identified as way to improve the quality of work that students submit. Related to this, recent studies concerned with Turnitin have foregrounded its capacity as an educative tool that improves students' understanding of academic misconduct. Academic writing, and the ability of students to appreciate feedback as a significant component of learning is often hidden behind the technological platform of Turnitin. In many cases Turnitin is conceived as software used to detect dishonesty and frame students for inappropriate citation, or misuse of referencing. We seek to address this, by examining more the pedagogical value of online feedback systems in the context of widening participation and TEF. Significantly expanding the discussion beyond plagiarism, taking a genre-based approach, and positioning both academic writing and Turnitin/feedback within the context of academic literacies, this paper intervenes with current debates. The case study draws on qualitative data recorded from students, tutors, and the Turnitin software system. By doing so, insights are generated into best software practice that have profound implications for HEIs, most especially those with widening participation agendas. Based on these data, the study provides a series of practical software development recommendations to help raise standards amongst student writing.

1. Introduction

Within the Higher Education learning environment, the online formative and summative feedback process in platforms such as Turnitin is most effective when both students and staff are actively involved (Taras, 2003). However, students may fail to understand or interpret the feedback provided (Duncan et.al, 2007; Taras, 2003) and, practitioners frequently foreground deficits at the expense of developmental approaches (Hattie & Timperley, 2007). Semi-structured focus group interviews have demonstrated a bifurcation between student and staff perceptions of the use-value of Turnitin as a platform for learning, with only 27% of responses with positive connotations being initiated by staff. Extending beyond pedagogical debates into a software specification approach, this study provides new insightful recommendations for enhancing the use of software such as Turnitin as a potentially pedagogically impactful platform for all its users.

The provision of high-quality assessment feedback to promote improvements in written assessments is closely aligned with the current direction of UK Higher Education policy; this is

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especially pertinent for Higher Education Institutions (HEIs) with widening participation agendas (Department for Business Innovation and Skills [BIS], 2016a). As a particular measure of this, in May 2016, the Department for Business Innovation and Skills (BIS) published its *Technical Consultation* document for UK universities (BIS, 2016a), part of its newly-devised *Teaching Excellence Framework* (TEF). The *Technical Consultation* document – being consultative in tone – offers a series of possible markers for success, rather than concrete definitions. However, it is particularly clear in its wish to support 'the development, progression and attainment of students from disadvantaged backgrounds is a mark of effectiveness and therefore a key focus of the TEF' (BIS, 2016a). To be sure, the TEF aims to measure the effectiveness of educational outcomes for students in Higher Education and address the needs of employers in a 'knowledge economy' (BIS, 2016b). The framework specifically seeks to promote improvements in student learning outcomes (*ibid*., p. 12). In keeping with this rationale, recent studies have explored how far structured feedback mechanisms, such as through formative assessment, can enable positive student assessment outcomes in the context of progressive approaches to assessment (Yorke, 2003; Butler & Roediger, 2008). Exploring the systems to provide structured feedback meaningful feedback, then, responds to both emerging UK educational policy and current scholarly debates.

More specifically, the TEF *Technical Document* identifies a link between structured student feedback, and subsequent progression and attainment (BIS, 2016a). Accordingly, Wingate, Andon and Cago (2011) – in their study of the practice of embedding the teaching of academic writing conventions into course curricula – note that structured feedback leads to increased assessment grades and therefore a greater chance of student progression (Wingate, Andon and Cago, 2011, p. 73). However, they find that – while most students approve of the formative feedback process – it can be impractical to deliver detailed face-to-face feedback from online submissions for larger cohorts. They decide that, since the formative feedback process for academic writing interventions is so labour intensive, 'additional resources' may be needed, including standardisation of feedback practice (Wingate, Andon and Cago, 2011, p. 73). One solution for the problem identified by Wingate may lie in providing at least partially-automated online feedback on features of academic writing; such a feature, in the context of TEF, could allow HEIs to demonstrate their pursuit of student progression through structured feedback.

In keeping with this, Yang's (2011) study focuses on a number of second-language science students to explore whether online peer assessment may be as an additional resource for feedback on writing. The system described by Yang involves an active visualisation (and discussion) of how peers solve problems through writing, articulated in a way that makes the descriptions of writing processes explicit and clear (Yang, 2011, p. 629). However, Yang cites a number of studies (Cho & Schunn, 2007; Liou & Peng, 2009; Lundstrom & Baker, 2009; Storch, 2005) that highlight how peer assessment of academic writing may result in discussion of lexical or syntactical features, which Lavelle and Zuercher (2001) dismiss as 'surface concerns' (p. 376). The study acknowledges further shortcomings arising from the expectation that students simply write like their peers (Braine, 1997; Paulus, 1999), as opposed – presumably – to adopting the styles and structures of writers in their wider discourse community. Yang's solution to this is to encourage students to make larger-scale structural changes to peers' writing as part of the coaching process (Yang, 2011, p. 268). This focus on structural features echoes the findings of Amos and McGowan (2012), who advocate analysis of the various sections of a text as a means to explore more general concepts of academic writing genres (Amos & McGowan, 2001, p. 2). However, in the only text extract Yang supplies, 7/8 of the peer corrections are surface-level changes, with only one of the example changes being structural, although a later description of student interactions mentions *local* and *global* changes equally (Yang, 2011, p. 697). Overall, though, Yang's study places slightly more emphasis on local/*surface*-level changes (38 mentions) than global changes (35 mentions). Clearly, whilst online peer feedback for writing promotes active dialogue on writing decisions, student-teacher interactions can enable a more constructive learning process based on a more sophisticated dialogue that simultaneously

addresses a text's language, purpose, and structure (Amos & McGowan, 2012; Lavelle & Zuercher, 2001; Nattinger & DeCarrico, 1992; Swales, 1990).

Online systems like Turnitin's Feedback Studio have been identified as means to improve the quality of work that students submit. Related to this, recent studies concerned with Feedback Studio have foregrounded its capacity as an educative tool that improves students' understanding of academic misconduct. Academic writing, and the ability of students to appreciate feedback as a significant component of learning is often hidden behind the technological platform of Feedback Studio. In many cases, Feedback Studio is conceived as software used to detect dishonesty and frame students for inappropriate citation, or misuse of referencing. What are the student stories that manifest from the technology we use? How do we engage with students and help them see the value of technology in aiding their academic and professional development? This paper explores the use of Turnitin software as a means to enhance student learning through feedback and feedforward practices.

1.1. Feedback Culture and Directed Learning

The current corpus of research on feedback acknowledges its role in directing learning, as well as being an effective tool for learning (Hattie & Timperely, 2007; Shute, 2008). The seminal review by Black and William (1998), considered 250 studies on formative feedback and concluded that good and extensive feedback leads to increased student engagement and higher quality learning.

Hattie and Timperley (2007) define feedback as information provided by an agent regarding aspects of one's performance or understanding. Shute (2008) posits that the intention of providing students with feedback is to close the gap between the standard achieved and the standard desired. This is compounded by students who feel that feedback is meaningless and provides little direction for future improvements. How often do students read the feedback or actively seek out opportunities for feedback? Does online feedback change the dynamics of how students see and understand feedback comments? Duncan *et.al,* (2007) offers a possible analysis of how the student-assessor feedback nexus operates. According to Duncan *et.al,* (2007), part of the problem is that academics and students see feedback in isolation to other components of the teaching and learning process, and consider feedback to be primarily a teacher-owned process. This is corroborated by Taras (2003) who explains that the feedback process is most effective when all the protagonists are actively involved. A further problem identified by both Duncan *et.al,* (2007) and Taras (2003), is that students often fail to understand or interpret the feedback provided. This could, potentially, be due to the language used by academic staff in providing feedback comments. Hattie & Timperley (2007) find that many academics, when providing feedback, tend to focus on the correctional or deficit elements within the student work at the expense of providing instructional and developmental guidance. Studies on feedback impact on student learning achievement indicate that feedback has the potential to significantly enhance learning through feedback quality and not necessarily quantity. Hattie and Timperely (2007) also suggest that learning gains are heightened when feedback is directed towards developmental improvements as opposed to feedback that focusses on praise and rewards. Likewise, in their study of the psychology of learning development, Brown, Roediger and McDaniel, (2014) problematise approaches to learning that rely solely on students' perspectives, and emphasise a potential gap between perceptions of learning needs versus meaningful acquisition of learning gains, which can be and uncomfortable process for the learner. Accordingly, feedback is most effective when it addresses realistic and achievable goals and does not threaten student self-esteem; feedback systems such as Turnitin may be able to play a part in this.

1.2. Feedback for Learning and Transition

New students, or students new to higher education learning environments, often face the challenges of transition. The literature suggests that there are multiple gaps in prior student learning experiences and those of higher education expectations (Rolfe, 2011). What students believe they understand in terms of academic skills are often poles apart from academic staff expectations

(Taylor, 2008). Rolfe (2011) suggests that the difference in the experience – expectation continuum, could be due to cultural shifts and information usage. Brickman, Gormally and Marchand Martella (2016) state that wide discrepancies exist between how academic staff and students, especially entry students, perceive feedback effectiveness. According to Brickman, Gormally and Marchand Martella, (2016) academic staff thought that feedback, including online platforms, helped student understanding and learning. Students strongly disagreed. Taylor (2008) concludes that timely feedback on early assessed work is a positive step in supporting student transition. Consequently, Brickman, Gormally and Marchand Martella (2016), like Brown, Roediger and McDaniel (2014), propose that written feedback specifically should be seen as an initiation of a post-performance discussion between academic staff and student, and part of a wider learning process. Rolfe, (2011) suggests that learning technologies such as Turnitin may offer a solution to support the transition into Higher education by providing accessible and rapid feedback online. Rolfe (2011) found that using online instant feedback, impacted positively on students' cognition about their writing. This feedback, delivered predominantly through Turnitin, enabled students to develop their literacy skills and consider their writing styles within set texts. This is further corroborated by Schute (2008) who affirms that online technologies could support exciting and creative learning activities. Similarly, Brown, Roediger and McDaniel (2014) note that '[i]nterleaving and variation mix up the context of practice' (p. 84) and leads to an enhancement of the learning process. In keeping with this, Lea and Street (2006) and Bhatia (2010) explore the connections between a text's purpose and its form, thereby interleaving a text's core subject and the linguistic and/or structural features, whilst noting that students have to mix these in their writing practice.In contrast, Chew, Jones and Blackey (2009) argue that the focal point should be pedagogically enabling and empowering students to learn with and through technology. To this end technology should be used to enhance learning, teaching and assessment activities. Buckley and Cowap (2003) suggests that technology enhanced learning research may lack an appreciation of different learning styles. The literature appears to focus on the troublesome or problematic areas of giving and interpreting feedback, rather than the reporting on effective strategies as well as where technology enhanced learning can support student engagement with feedback.

Evans and Waring (2011), explored students' perceptions of feedback in relation to cognitive styles and culture, the study found cultural variables impact significantly on student assessment feedback preferences. The study encourages HEIs to consider the micro-cultures they promote when students are inducted into receiving feedback for learning. Using a social constructivist approach, Evans and Waring (2011), found that students are able to better consider their beliefs about learning which promotes ownership of learning and leads to self-regulation in learning.

Evans (2016) has developed an Assessment Tool (EAT) which includes three core dimensions of practice: Assessment Literacy (requirements for assessment), Assessment Feedback (all feedback exchanges within an assessment), and Assessment Design (an integrated and meaningful approach to assessment which addresses: relevance, volume, inclusivity, collaboration, sustainability and manageability). The tool is grounded in the concept of students as active contributors to the assessment feedback process rather than seeing assessment as something which is done to them. Assessment practice is enhanced once the interconnected nature of the three core dimensions of practice is fully considered. The tool is fundamentally about promoting self-regulatory practice in assessment and asks "what does student engagement in assessment and feedback look like?" Software such as Turnitin, then, can potentially play a role in self-regulatory practices to enhance student performance, if designed correctly, and placed at the centre of a larger process of academic development through dialogue.

2. Method

2.1. Research Design

Using grounded theory and thematic coding in particular (Gibbs, 2007), we explored links between themes by relating responses back to theoretical perspectives. To further assist in the analysis of emerging themes, we found the framework suggested by Charmaz (2003) useful. This includes asking a series of basic questions during the intensive reading phase of the interview transcription: what is going on?; what are respondents doing or saying?; what do these actions and/or statements take for granted?; how do structure and context serve to support, maintain, impede or change these actions and/or statements?

The richness of the responses made it possible to examine clusters of patterns and assign specific tags to better describe and conceptualise the narratives of the participants. During the decoding of the transcripts it became apparent that tensions exist between being a giving and receiving feedback online. The primary themes related to: meaning, purpose, action, and development of skills and competencies both as a member of staff and student.

8 higher education professionals, and 14 students participated in group semi-structured interviews facilitated by the researchers. The practitioners and students responded to a general call for research participation. Students were undergraduates at various stages in their degree, and were drawn from Public Health and Sports Therapy courses. Partipication was entirely voluntary and there were no incentives offered. Likewise, practitioners were drawn from Public Health and Sports/Sports Therapy courses.

2.2. Data Collection Tool

Participants in the semi-structured group interviews were asked to discuss their experiences of using online platforms such as Turnitin for feedback and learning enhancement. These included both challenges and opportunities. All interview responses were recorded and transcribed. Participants were asked to review and check the transcripts for accuracy. All participants were made aware that participation in the study was voluntary and that they had a right to withdraw up until the point of data analysis.

2.3. Data Analysis

The current study took the form of a conventional content analysis. No preconceived categories were identified; instead, all categories and names for categories flowed directly from the data as observed (Kondracki & Wellman, 2002). Data collection and analysis focused exclusively on the narratives and comments emerging from the focus groups. Focus groups, using semi-structured interview questions were convened at different points during the academic year. The participants within each focus groups were students and staff studying and teaching, predominantly undergraduate students. Deliberately interleaving datasets, and responding to Brown et al. (2014), the present study merges quantitative and qualitative data from students with qualitative and quantitiative data from tutors, connecting these balanced approaches to previous studies that combine tutor and student data. Specifically, though many suggested improvements are guided by student opinion, our approach provides space for tutor dialogue. Participants were asked to discuss their experiences of receiving and/or giving feedback through online platforms such as Turnitin. They were asked about their understanding of the value and purpose of feedback, and how feedback could be used to enhance academic writing skills. The research protocol together with the semi-structured interview questions were reviewed and approved by the University of East London Research Ethics Committee. Comments, narratives, and recommendations ensuing from the interviews were then tabulated within an Excel spreadsheet for analysis. Both researchers read and reviewed the raw comments before deciding on relevant themes for analysis.

Using Hermeneutic Phenomenology (Douglass & Moustakas, 1985), crafted stories (Crowther, Ironside, Spence & Smythe, 2017) and thematic coding in particular, (Gibbs, 2007) we explored links between themes by relating responses back to theoretical perspectives. This includes asking a series

of basic questions during the intensive reading phase of the interview transcription: what is going on?; what are respondents doing or saying?; what do these actions and/or statements take for granted?; how do structure and context serve to support, maintain, impede or change these actions and/or statements? As the participants described and narrated their individual and collective experiences of feedback, it was necessary to apply multiple tags and codes to the transcription of the interview narratives.

The richness of the responses made it possible to examine clusters of patterns and assign specific tags to better describe and conceptualise the narratives of the participants. During the decoding of the transcripts it became apparent that tensions exist between staff and students, and these were further emphasised by a "connotation" category, which interpreted the results as either positive, negative, or neutral in import. The resultant categorised responses enabled some of these tensions and relationships to emerge more deeply in the semi-structured interviews. Here we used a form of template analysis as we coded transcripts, identifying themes. King (2004) describes template analysis as a set of techniques for thematically organising data. Some of the themes can be *a priori* though modified and interpreted by the researchers. We coded the same data independently, meeting to share our interpretations, reflect on the process, and develop our themes further.

3. Results

Focus group responses generated 398 total categorised comments. Of these, 111 were from tutors, and 289 comments were made by students.

3.1. Connotation View

Analysis of the comments demonstrate that – when considering the Turnitin platform – students and tutors appear to most frequently make mention of similarity scores/plagiarism in combination with the general learning context in which that information is used.

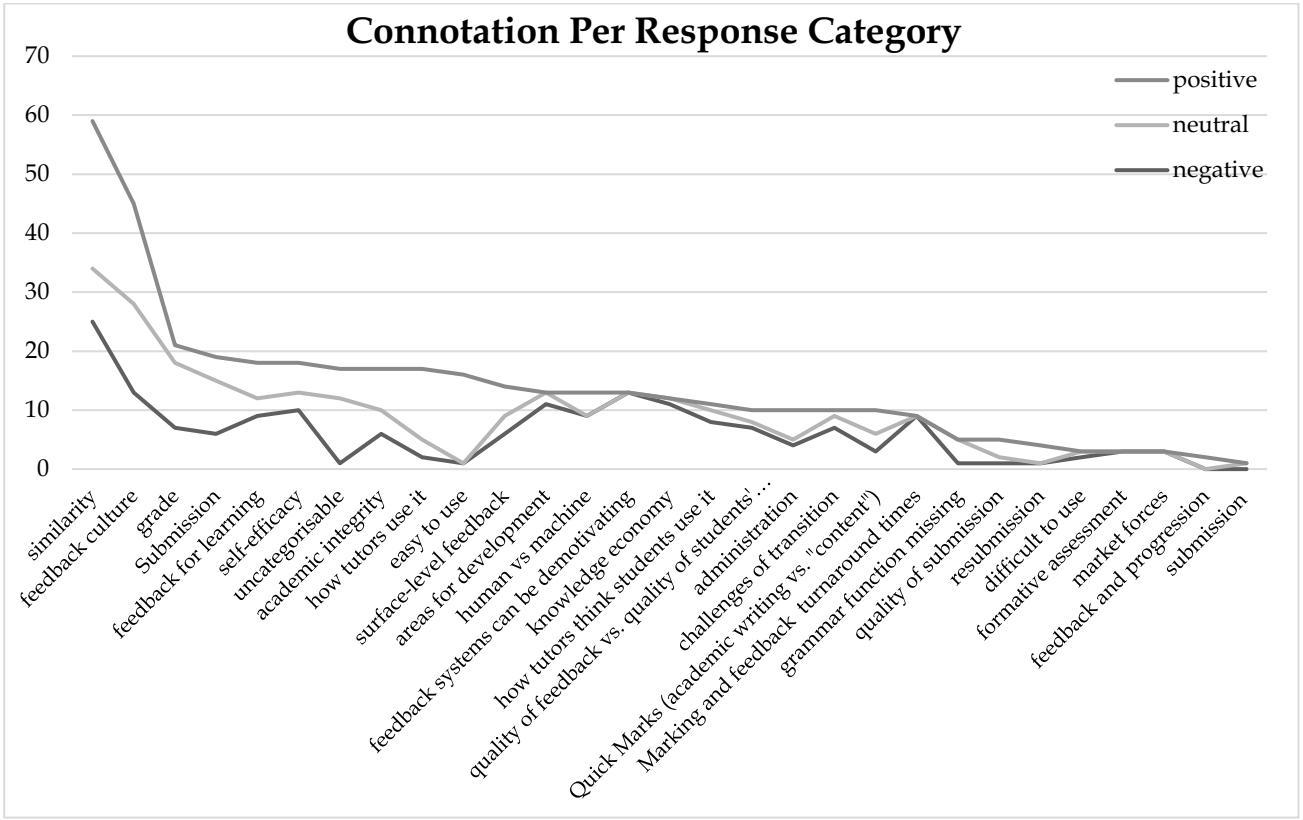

Figure 1. Connotation per response category

The five most frequently recurring categories of response related to similarity scores, grades, the process of submission, and what feedback was for, or how a culture of feedback has emerged at the university. "Similarity" had a notable separation between positive, negative, and neutral, suggesting strong differences of opinion.

The most frequently recurring useful categories of response are summarised below, in order of frequency.

Similarity means discussions around the Feedback Studio similarity score, and how it may be used to detect similarity to the words used in other writers' studies. *There was a significant bifurcation of opinion in responses in this category, and it was clearly the most discussed concept.*

Feedback culture relates to debates concerning how tutors and students give, receive, and use feedback, and also how feedback software is used in the context of the university. *There was a significant bifurcation of opinion in responses in this category, but fewer responses overall, and second only to "Similarity".*

Grade: relates to discussions around academic scores and assessment grades in general. *There were around twice as many positive responses with the "Grade" category than negative responses.*

Submission relates to the processes and conditions of submitting work for assessment, and can include practicalities such as deadlines. There were around *four times more positive responses with the "Submission" comment than negative responses.*

Feedback for learning means how feedback can be used as part of the general learning cycle. Comments in this category focused specifically on the pedagogical potential of feedback, as distinct from the practicalities and institional culture of feedback (which is covered in the "feedback culture" category).

Self-efficacy specifically relates to how students improve their own skills and learning by acting upon feedback.

Academic integrity relates to discussions around the ethics of academic writing, most especially collusion, plagiarism, referencing/citation, and other related matters. This is different from "similarity", which is focused on the similarity score statistic provided by Turnitin.

Surface-level feedback means any consideration of features such as a punctuation, grammar, formatting, etc., which may be unrelated to the core arguments and thematic development of a text.

Human vs. machine: comments in this category were concerned with whether automation has a place in the learning environment, and whether automation is valuable in enhancing learning.

How tutors use it: comments in this category explored the ways tutors used the software.

3.2. Most Notable Comments

A comparison of some of the notable positive or negative comments amongst students and tutors appears in the table below.

The range of responses shows notable bifurcation in both students' and tutors' assumptions as to whether and how the software benefits students as part of the formative learning process. None of the more notable responses from the frequent categories make mention of the act of writing. All of the notable responses above focus on the practicalities and purpose of the software. Many of these selected responses also address how far the software can be used to generate dialogue as part of the feedback process.

Table 1.
Notable positive and negative comments by frequent themes

Category	Notable positive response	Notable negative response	Related studies
Similarity	[Student:] 'It build[s] you[r] confidence to write in your own word'	[Student:] 'sometimes it tells me I am similar to other writers who I have never known'	Ryan et al. (2009) and Buckley and Cowap (2013)
	[Tutor:] 'is less of a worry for me. I've never had too many issues with plagiarism pre or post Turnitin.'	[Tutor:] 'Students feel as though they're allowed to do 'X' amount of plagiarism. [They think:] 'am I savvy enough to get under the limit?''	Ryan et al. (2009) and Buckley and Cowap (2013)
Feedback culture	[Student:] 'Lecturers feedback when you go through'	[Student:] 'some teachers only give negative feedback'	Ryan et al. (2009) and Buckley and Cowap (2013))
	[Tutor:] '[Feedback Studio] does actually start to help us coach students how to understand the criteria for their assessment and how they should be able to self-regulate their own work before we've even marked it to say "yes, I should be getting X for this."'	[Tutor:] 'Mainly, I think they are thinking what is my percentage figure, or am I on the right track. … I think the tool hasn't moved past that main function into one about general advice on essays; that's a very difficult area…'	Ryan et al. (2009) and Buckley and Cowap (2013)
Grade	[Student:] 'I go to the grade to check and go straight to the marking band to strengthen my weakness.'	[Student:] 'sometimes you lose marks if your similarities are too high'	Ryan et al. (2009) and Buckley and Cowap (2013)
	[Tutor:] 'We actually find that [when they have to guess their grades] students grade themselves a lot more harshly'	[Tutor:] 'That would be my biggest bugbear with Feedback Studio … I have no control of [separating/suppressing the grade from the list of feedback], and I think that is a missed opportunity.'	Buckley and Cowap (2013)
Submission	[Student:] 'It guides me through my deadlines.'	[Student:] 'It helps with the deadlines not the assessments.'	Turnitin (2016b); Bandura (1997) and Pajares (2003)
	[No positive tutor response.]	[Tutor:] 'If they submit again, I think it overrides the first draft.'	Turnitin (2016b); Bandura (1997) and Pajares (2003)
Feedback for learning	[Student:] 'Or we submit something to [our tutor] and he says 'as soon as you've submitted it make an appointment with me and we'll go through it''	[Student:] 'It's very formal. It's a very formal way … [I prefer to] get things explained [in person]'	Shute (2008), Hattie & Timperely (2007)
	[Tutor:] 'I prefer to use multiple methods in feeding back to students. My students prefer audio. In this sense, they connect with my voice and understand the journey I travelled in reviewing and assessing the work – both the highs and the lows.'	[Tutor:] 'Staff – we spent time feeding back without ever questioning for whom is the feedback intended.'	Shute (2008), Hattie & Timperely (2007)

3.3. Most Popular Keywords in Responses

Analysis of the 10 most popular keywords from the 398 individual comments (excluding functional words such as 'and' or 'like') shows respondents notably mention feedback over three times more often than similarity:

Table 2
Frequency count of the most popular respondent keywords

Keyword	Grand Total
feedback	108
work	60
think	56
students	54
turnitin	52
similarity	34
people	28
comments	27
need	26

Common to these keywords are also notions of practicality, interaction, human communication and dialogue. There were 464 of these keywords overall.

3.4. Relatedness of Responses to Surveyed Studies

The studies by Ryan et al. (2009) and Buckley and Cowap (2013) were of particular relevance to the responses generated by the repsondents to the present study; these two predecessor studies were three times more pertinent than the second most relevant study.

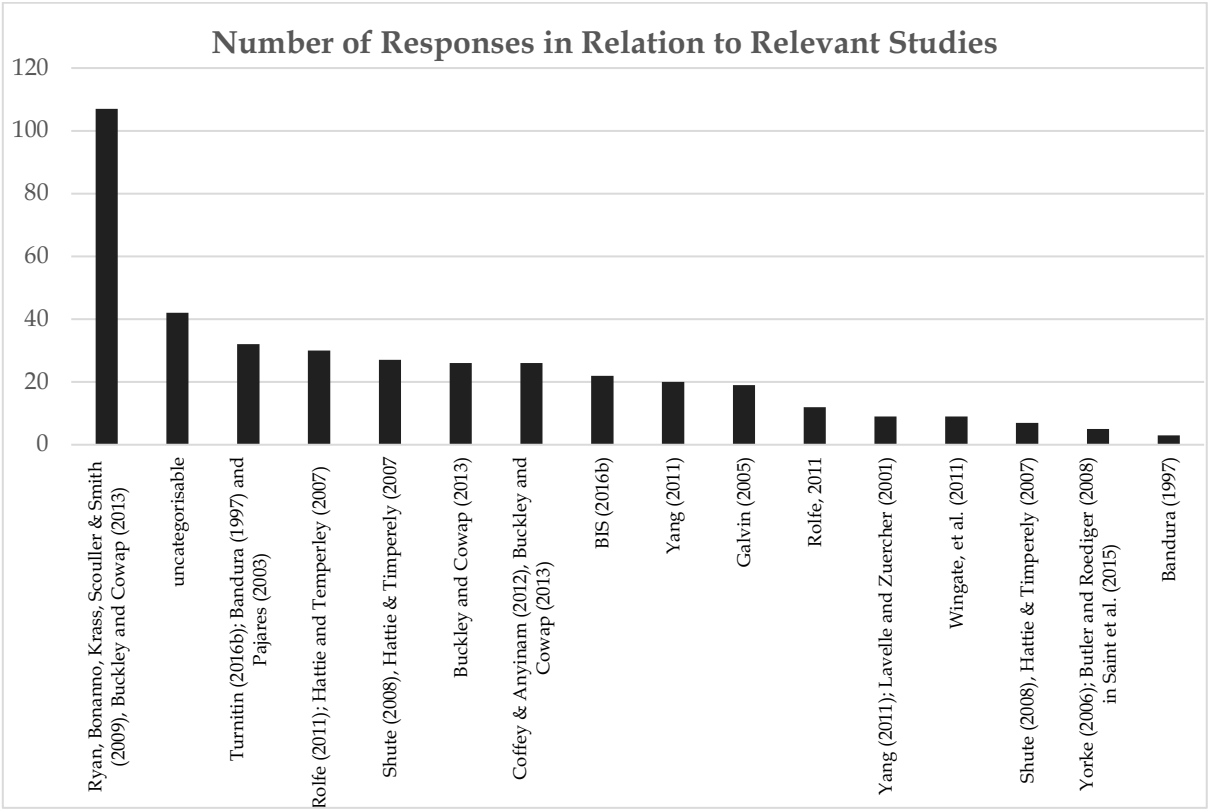

Figure 2. Relatedness of Responses to Surveyed Studies

Discussion

The present study sought to examine how software such as Turnitin functions to promote developmental learning. The literature suggests that feedback is a complex process often fraught with difficulty (Yorke, 2003). This complexity is heightened through a number of key factors, including purpose, direction, genre, language and impact. The results suggest that for feedback to be meaningful it needs to follow a developmental pathway, one that directs the receiver of the feedback to a functional outcome. Accordingly, the barriers to feedback for development are numerous, and often feedback intention is malaligned with feedback interpretation and value. Drawing on the work of Ryan et al. (2009), the study sought to better understand the tensions that exist between delivering feedback and receiving it. It was evident through the analysis that Turnitin can be a barrier to learning and thinking. This was captured in comments that tended to dehumanise feedback and present it as a mechanistic process devoid of interaction, critical discussion and collaboration. Hattie and Timperley (2007) make explicit that feedback has the potential to focus predominantly on remedial and corrective actions. Building on this, the present study found that for feedback to be useful to the recipient it needs to be anchored in and aligned with genre type. Moreover, the systemic approaches we foreground are intended to terminate in focused action points for learning development (Brown et al., 2014), rather than unfocused emotional reflection. Specifically, though many suggested improvements are guided by student opinion, our approach provides space for tutor dialogue. These findings raise important pedagogical as well as philosophical questions around the language used to feed back to students. The results further offer a critique around whether significant differentiation in feedback content and application needs to be consider against level of learning. Using a micro-macro-meso model, student and tutor responses suggest that the feedback cycle permeates individual and institutional domains. Online technologies, then, can potentially offer positive solutions for closing the expectation and experience gap. Students' understanding of what is expected can differ vastly from staff views on the same issue. This study considered how students perceive writing expectations based on prior experiences. The results have identified a tension between using technology to avoid plagiarism and to promote meaningful learning development.

Conclusion

The findings suggest that feedback is complicated and can present multiple issues for both students and staff, as the bifurcation of opinion concerning both 'similarity' and 'feedback culture' goes some way to demonstrate. Even though the study could have benefitted from a cross-disciplinary approach, involving more participants, the initial results have implications for future software-based practices, and the Recommendations in our Appendix seek to present those within the general learning environment.

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Appendix. Recommended software changes for enhancıng feedback

By relating key comments from the interviews in our study to the work of Yorke (2003) and Bhatia (2010), key differentials such as user type, descriptions change request and anticipated outcomes can be identified, following the user story software framework advocated by Jeffries (2001). These differentials have implications for software development and revision to the current Turnitin platform, enabling staff and students to better consider the value, purpose and impact of feedback as a change agent. Building on the comments of both students and tutors, it is possible that changes to software can effect changes to feedback culture. These recommendations are presented in the table below.

Full user story	Related Notable Focus Group Comment	Related frequent comment category	Related Study/Theme
As a student, I want to see my tutor's feedback as bubbles around the text, which I can read easily, expand, and copy as I see fit, so that I can easily navigate my way around the feedback and understand it fully. This change would affect the front-end feedback entry area.	[Student:] Staff need to spend more time, considering for whom the feedback is intended. I often feel staff are feeding back to themselves. Feedback that is wordy and complicated is a distractor not an enabler for learning. some teachers only give negative feedback	how tutors use it; feedback culture; feedback for learning	Structured feedback for assessment improvements; additional resources to support this - Wingate et al. (2011)
As a university, I want to introduce my own corporate branding, contact details, etc., onto the system, so that I can present the system to my students as a seamless part of the overall service they receive from me; this will help me promote the service fully. This change would affect the entire system, or multiple areas.	[Tutor:] It's not fulfilling that feedback loop because not enough students are accessing it.	how tutors use it; feedback culture; feedback for learning; human vs. machine	knowledge economy - BIS (2016b); Mann (2016)
As a university, I want to host the service on my own domain, such as: http://tutorfeedbacksystem.myinstitution.ac.uk, so that I can present the system to my students as a seamless part of the overall service they receive from me; this will help me promote the service fully. This change would affect the entire system, or multiple areas.	[Tutor:] It's not fulfilling that feedback loop because not enough students are accessing it.	how tutors use it; feedback culture; feedback for learning; human vs. machine	knowledge economy - BIS (2016b) ; Mann (2016)

Appendix continued

As a student, I want to receive feedback that is more about my development as an academic writer in my chosen discipline than it is about a punitive approach to similarity and plagiarism, so that I can develop, progress, and succeed as a learner. This change would affect the front-end feedback entry area.	[Student:] even if you have perfect writing … you can lose grades [by having high levels of similarities] more information about my weaknesses, about what is missing from my essay I had about two paragraphs, I forgot to change in my own understanding. That was a wake up call. [give] feedback [that identifies] where you need to improve they need to not believe Turnitin too much feedback show[s] where to improve [Tutor:] It's not fulfilling that feedback loop because not enough students are accessing it. My view would be that is Turnitin a plagiarism tool or is it a development tool? There should be a little bit of coaching or feedback within it, not just the percentage [similarity score]. [Student:] Whoever owns [the] institution … if they bring in like Turnitin, they're saving time and money but they're also limiting on what we do and what feedback we can get. At an earlier level, I think students probably need more guidance.	feedback culture; feedback for learning; self-efficacy; surface-level feedback; similarity; academic integrity	Structured feedback for assessment improvements; additional resources to support this - Wingate et al. (2011); impactful nature of developmental feedback - Hattie and Timperely (2007); Mann (2016)
As an administrator, I want to create lots of bespoke overrides and permissions about nearly all of the features of the software, based on an institutional, full-administrator, tutor, or student profile, so that I can toggle the level of support that is available to all user types. This change would affect the entire system, or multiple areas.	Whoever owns institution … if they bring in like Turnitin, they're saving time and money but they're also limiting on what we do and what feedback we can get.	human vs. machine; feedback culture; feedback for learning; self-efficacy; how tutors use it	Ensuring all protagonists are all actively involved in the feedback process - Taras (2003); knowledge economy - BIS (2016b)

Appendix continued

As an administrator, I want to integrate the system with other data-producing systems such as Turnitin, Moodle, Blackboard, Mahara, SITS, etc.; this can be linked to the tutor feedback functions in a seamless and entirely customisable way; I can also decide what user type can see what information, and how the information is displayed, so that I can provide students and tutors alike with a completely customisable view of performance data linked to the feedback provided. This change would affect the system database.	if I submitted my work and I got it back at 40[% similarity]; if I hadn't seen them [the tutor] I could have got a 50[% similarity]. When you go to see them [the tutors] you can push it up to like a first because you get the clarification. It sinks more into your head if you're communicating.	how tutors use it; feedback culture; feedback for learning; similarity; self-efficacy; grade; academic integrity	Importance of seeing feedback within the context of other academic activities - Duncan *et.al.* (2007)
As a tutor, I want to have an option where tutors can receive qualitative and quantitative feedback from the student, which assesses and comments upon the feedback that the tutor originally made, so that I can make the feedback process truly circular, so as to understand how to constantly improve my own feedback practices. This change would affect the front-end feedback entry area.	[Student:] I really don't [always] know where I went wrong, so I'm going to have to just fix up on my sentence structures. Make my own feedback, basically.	self-efficacy; feedback for learning; how tutors use it; surface-level feedback	Technology used in the feedback cycle – Ball, Maguire, & Braun, (2012); Mann (2016)
As a student, I want to view a statistic based on how other people on your course have done in the same assignment. This is a single average number of other students' grades. From this, I can see whether I am averaging higher or lower marks, so that I can see how well I am doing, and how I can get even better. This change would affect the front-end feedback entry area.	[Student:] … I was aware of it [needing to improve] and that's because it was a draft for us to see where we are standing and to see where we can improve it	grade; feedback for learning; self-efficacy; submission; academic integrity	Motivational aspects of understanding peer performance - Hepplestone *et.al.* (2011); Yang (2011)
As a student, I want to check other students' ratings of the feedback they have received. This feature allows me to see the general rating that has been provided by your peer group, so that I can check my feedback-ratings and opinions of tutors' feedback against those of my peergroup. This change would affect the front-end feedback entry area.	[Student:] We're not asking you to do our essays for us, but to say 'this is really good' and 'maybe you should expand on this', 'maybe you should look at this'. Just some more guidance.	feedback culture; feedback for learning; self-efficacy; how tutors use it	Students' perceptions of feedback - Evans and Waring (2011)

Appendix continued

As a student, I want to receive structured feedback on my academic work, so that I can be more successful in my assignments at university. This change would affect the entire system, or multiple areas.	[Student:] … I was aware of it [needing to improve] and that's because it was a draft for us to see where we are standing and to see where we can improve it probably the more you work … the more you develop your writing skills … when my colleagues asked me, I was [better able to do the work]. It gives me more confidence. … when I submitted my work, it didn't show any kind of plagiarism or anything. It just gave me a good feeling that I had done good work on my own ... It increases your self confidence. ... I feel I can do it, whereas before I felt I couldn't. ... I was scared at the beginning, but then once I took more steps I got there. [Tutor:] But I haven't ever said "do you want feedback on the content or do you want feedback on the style?"	feedback for learning; feedback culture; submission; human vs. machine; how tutors use it; self-efficacy; surface-level feedback; academic integrity	structured feedback mechanisms - Yorke (2003); Butler and Roediger (2008)
As an administrator, I want to generally control the many layers of the software's functions, and create bespoke services based on my preferences, tutors' preferences, institutional preferences, or students' preferences, so that I can enjoy a system that is completely customised for my institution. This change would affect the entire system, or multiple areas.	Whoever owns institution … if they bring in like Turnitin, they're saving time and money but they're also limiting on what we do and what feedback we can get.	human vs. machine; self-efficacy; feedback culture; feedback for learning	Ensuring all protagonists are all actively involved in the feedback process - Taras (2003); knowledge economy - BIS (2016b)
As a student, I want to view advice on the structural features, language, usual conventions, and typical numerical functions of the kind of text I am writing, prior to handing it in. There should be some sort of lookup process that matches the text-type to exemplar material for me to review, so that I can better meet the purposes of my text. This change would affect the front-end feedback entry area.	[Student:] more information about my weaknesses, about what is missing from my essay when I wrote my work in Microsoft Word I saw I was having grammar problems but when I looked on Turnitin it looked more professional so I could pick up on [things like] sentence structure … and change my work … it makes you want to make you get your work looking more professional	surface-level feedback; feedback for learning; submission; self-efficacy; feedback culture	feedback on adopting peers' stylistic features - Yang (2011); feedback on structural features of a text - Amos and McGowan (2012);
As a student, I want to be able to view an example text that is similar in purpose and content to the one I have to write, but is not an exact match, so that I can understand how other people write these sorts of texts successfully, and easily access it through the submission/feedback window. This change would affect the front-end feedback entry area.	[Student:] I think with our class in particular, some people have taken a lot of time out of education before they have come to uni. I've been out of education years before uni, and … before this, well, I hadn't [written] a paragraph in God knows how many years. It's a massive step. [Student:] I would prefer directed feedback to provide illustrated examples of how to improve my work	self-efficacy; feedback for learning; surface-level feedback; how tutors use it	students think feedback is better when it includes specific examples – Scheeler, McKinnon and Stous, (2012)

Appendix continued

As a tutor, I want to be able to upload a text that I have decided is a suitable exemplar of the kind of text I expect students to write. This text may be a previously-published work, or an example from a previous student cohort, so that I can help students better understand the purpose, audience, and techniques of these texts. This change would affect the front-end feedback entry area.	[Student:] … I was aware of it [needing to improve] and that's because it was a draft for us to see where we are standing and to see where we can improve it	feedback for learning; feedback culture; submission; human vs. machine; how tutors use it; self-efficacy; surface-level feedback; academic integrity	students think feedback is better when it includes specific examples - Scheeler *et.al.* (2012)
As a student, I want to check feedback from my most recent work. I can also see a quick summary of feedback from work before that. This can be filtered by module, tutor, or time., or academic year, so that I can understand what I need to work on, and provide a useful report of how my skills have changed/improved over time. This change would affect the front-end feedback entry area.	[Student:] probably the more you work … the more you develop your writing skills … when my colleagues asked me, I was [better able to do the work]. It gives me more confidence. … when I submitted my work, it didn't show any kind of plagiarism or anything. It just gave me a good feeling that I had done good work on my own ... It increases your self confidence. ... I feel I can do it, whereas before I felt I couldn't. ... I was scared at the beginning, but then once I took more steps I got there.	feedback culture; feedback for learning; self-efficacy; submission	Feedback and progression - BIS (2016a); careful feedback cycles can improve progression - Wingate *et al.* (2011)
As a student, I want to be able to see a report that shows short extracts of my previous work that had a certain theme of feedback; these can be shown in a row-by-row list, or through some form of time display, so that I can see how far my practice has developed in certain key areas related to the features of specific genres of text I have had to write in the past. This change would affect the front-end reports.	[Student:] I have noticed that even though I have I have put a lot of effort in I only get like one sentence back in feedback … to me I don't think that gives you room to improve. [I'd need to have] a few more sentences telling me exactly what it went wrong like which paragraph was it which line was it.	how tutors use it; feedback culture; feedback for learning; self-efficacy; surface-level feedback	Self-efficacy (Bandora); careful feedback cycles can improve progression - Wingate *et al.* (2011)
As a student, I want to read a report as to when I handed in my work for feedback, so that I can help students track the current progress of their enquiries, and manage their deadlines more efficiently, thereby further enabling efffective progress. This change would affect the front-end reports.	[Student:] I think the way to improve the feedback process would be to adopt an Amazon type approach whereby students are kept informed about status of the submission and when grades and feedback will be released. I often find I submit work and then forget about the content until I receive the work back. I rarely act on the feedback given. Yes once you learn how to upload and submit, that's it. It is easy hence I am confident. It's easy to go back and read it again without losing information.	human vs. machine; feedback culture; submission	Feedback as an ongoing developmental process - Hattie and Timperley (2007, in van der Hulst *et al.*, 2014) and Shute (2008), in van der Hulst *et al.*, 2014).

Appendix continued

As an administrator, I want to decide which reports some tutors, or all tutors, are able to see, and whether I want to make my feedback information visible to other institutions, so that I can take control over the information passed to tutors, and possibly contribute to a cross-institutional network of progression data. This change would affect the entire system, or multiple areas.	[Tutor:] there were some weaknesses in terms of accessing the primary resources. You know when you go to on the right hand side and click on it and you have to request permission from the other institution. That's a bit annoying I suppose.	how tutors use it; feedback culture	Feedback defined as developmental information provided by an agent - Hattie and Timperley (2007); knowledge economy - BIS (2016b)
As a student, I want to open up a text/audio chat and/or video window to speak to an online tutor in an ad-hoc manner, so that I can receive real-time tutoring and/or reflection on my recent feedback, possibly in addition to the feedback I get through an assignment submission. This change would affect the entire system, or multiple areas.	[Student:] However, if I said that we are going to spend time [with the tutor] individually to point out where I went wrong. This is [software] is just the beginning We should get time though [for human contact] … if you look at the student as a consumer, we pay a lot of money. We don't want everything to be online . We want to talk to people face to face. We pay a lot of money: we should have a lot of one-on-one [contact tutorial time]. Digitals can make mistakes that humans can spot. Dehumanised.	how tutors use it; feedback culture; human vs. machine; feedback for learning	Discussions of recent feedback to enrich the feedback learning process - Brickman et.al (2016); knowledge economy - BIS (2016b)
As a tutor, I want to record and upload generic video tutorials, which are categorised on the system according the overall theme of the tutorial, which can be linked to the "quick tutorial" comments, so that I can provide generic help for students. This change would affect the entire system, or multiple areas.	Turnitin does encourage people to give quite a lot of comment about grammar and writing and how to do the essay but you could just develop a Quick Mark set about what is more specific to your topic and what is the feedback for your learning outcomes… You have to focus on what your goals are and make sure that's what you're giving them feedback on.	feedback for learning; submission; grade; feedback culture; human vs. machine	Providing feedback that is linked to academic writing genres more than plagiarism performance or just functions such as grammar - Coffey & Anyinam (2012), Buckley and Cowap (2013

Appendix continued

As a student, I want to search for and view individual pre-recorded tutorial videos that are related to my current enquiry; perhaps receive suggestions based on the text of the essay I have just submitted, so that I can receive specific and targeted help on areas of development for my academic writing. This change would affect the entire system, or multiple areas.	However, if I said that we are going to spend time [with the tutor] individually to point out where I went wrong. This is [software] is just the beginning. I just think we should have more class time with [tutors]. When [my tutor] puts his YouTube videos up before the class and expects us to watch them before the class, I think that's really good. I don't think [Turnitin] is as much as a help as these [academic writing tutorial] sessions. Before today['s academic writing session], I was wondering 'how am I going to write this essay?'. I think that's [i.e., academic writing tutorial is] more helpful than Turnitin.	feedback for learning; human vs. machine; feedback culture; self-efficacy; surface-level feedback	Student can effect change to their learning by identifying their developmental needs - Bandura (1997) and Pajares (2003) in Kostka and Malibroska (2016)
As a tutor, I want to be able to see how productive I am in comparison with other tutors - i.e., what my average turnaround time is for dealing with the work I have received, so that I can check my productivity against others and use this as a motivating tool. This change would affect the entire system, or multiple areas.	[Tutor:] [There is this] culture of submitting to the deadline and so the early submission to Turnitin is rare, I think.	submission; grade; feedback culture; self-efficacy	Timely and specific feedback enhances students' learning - Hattie and Temperley (2007)
As a tutor, I want to be able to edit a series of predetermined "quick tutorial" functions, that list common errors, and explain them in simple, non-technical language that the student will be able to understand, so that I can help students understand exactly how to succeed at their work, and not be baffled by unnecessary technical/linguistic terminology. This change would affect the front-end feedback entry area.	[Student:] I think with our class in particular, some people have taken a lot of time out of education before they have come to uni. I've been out of education years before uni, and … before this, well, I hadn't [written] a paragraph in God knows how many years. It's a massive step. [Student:] I had a set of 60 comments that I used to use, and put in 3 - 4 by hand, and then I transposed that into Turnitin and now I have different sets for each assignment. ... I'm more about thr content of it. [Tutor:] Turnitin does encourage people to give quite a lot of comment about grammar and writing and how to do the essay but you could just develop a Quick Mark set about what is more specific to your topic and what is the feedback for your learning outcomes… You have to focus on what your goals are and make sure that's what you're giving them feedback on. I like the idea that you're building a Quick Mark set for that assignment. It's not "here's the bank of 5 million quick marks that just focus on writing skills.	feedback culture; feedback for learning; human vs. machine; how tutors use it; surface-level feedback	Closing the gap between standard achieved and standard required - Brickman et.al (2016); Knight (2004), Rolfe (2011) - online technology to support individual learning; specific feedback is useful for learning - Scheeler *et.al*. (2012)

Appendix continued

As an administrator, I want to be able to decide whether tutors, or specific tutors, are able to edit a series of predetermined "quick tutorial" functions, that list common errors, and explain them in simple, non-technical language that the student will be able to understand, so that I can help students understand exactly how to succeed at their work, and not be baffled by unnecessary technical/linguistic terminology. This change would affect the front-end feedback entry area.	[Tutor:] The second thing I use most frequently is a bespoke Quick Mark set that I generated before we even used this. I had a set of 60 comments that I used to use, and put in 3 - 4 by hand, and then I transposed that into Turnitin and now I have different sets for each assignment. ... I'm more about the content of it.	feedback culture; feedback for learning; human vs. machine; how tutors use it; surface-level feedback	Closing the gap between standard achieved and standard required - Brickman et.al (2016); Knight (2004), Rolfe (2011) - online technology to support individual learning; specific feedback is useful for learning - Scheeler *et.al*. (2012)
As a student, I want to know when my feedback is due to be provided to me (which can take the form of an attractive "progress" graphic), so that I can plan my work around it and hit my deadlines. This change would affect the front-end feedback entry area.	[Student:] I think the way to improve the feedback process would be to adopt an Amazon type approach whereby students are kept informed about status of the submission and when grades and feedback will be released. I often find I submit work and then forget about the content until I receive the work back. I rarely act on the feedback given.	submission; feedback culture	Timely and specific feedback enhances students' learning - Hattie and Temperley (2007)
As a student, I want to be able to read basic feedback within about 24 hours, so that I can plan my work around it and hit my deadlines. This change would affect the entire system, or multiple areas.	[Student:] I would rather pay for somebody to read my essay and go through it with me than submit it to Turnitin and be given a feedback then. 'students as a consumer'	feedback culture; feedback for learning; human vs. machine; how tutors use it; surface-level feedback; self-efficacy; submission; feedback culture	Timely and specific feedback enhances students' learning - Hattie and Temperley (2007)
As a tutor, I want to be able to see a quick tally of all the papers I have examined in the last X days/ Y hours/ Z minutes, so that I can understand my own productivity. This change would affect the entire system, or multiple areas.	[Tutor:] The trouble with a prior submission to Turnitin to check it is the assumption that they're not working to the deadline, and there I think you've got a huge issue because most of our students work to the deadline. … I will have students in my class at 9am in the morning who still perceive that they have enough time to complete the assignment that's due that day.	feedback culture; submission; self-efficacy; feedback for learning	Timely and specific feedback enhances students' learning - Hattie and Temperley (2007)
As a student, I want to be able to see statistics about my tutor's usual turnaround time, and what other people have said in that regard, so that I can, if the system permits it, choose my tutor. This change would affect the entire system, or multiple areas.	[Student:] If we're not happy with the products for which we're paying, usually you take it back, don't you?	how tutors use it; feedback culture; human vs. machine	Timely and specific feedback enhances students' learning - Hattie and Temperley (2007); knowledge economy - BIS (2016b)

Appendix continued

As an administrator, I want to be able to integrate the data and reporting functions from Turnitin, Moodle, Blackboard, etc., into the system. This way, I can see a history of my previous feedback information, and see how it is related to my previous grades. If my institution uses, for example, Turnitin, then submitting to Turnitin should somehow feel seamless, and should seem to be part of the feedback/text examplar system, so that I can students and tutors alike are able to use multiple systems at once without having to log off or switch tabs in their browsers, and see how the feedback they have received on this system potentially relates to their performance on others. This change would affect the multiple areas.	[Tutor:] Do they evaluate themselves? If they've got to go through and think *what do I think my grade is*… the idea there would be they've got feedback, you would judge it against this this and this, and this is what you've done, and what do you think you've been graded? To try and make them get a realistic appreciation of their work, and kind of process the feedback independent of the grade.	feedback culture; feedback for learning	Linking feedback to the assessment and learning cycle, as an assessment tool - Evans (2016); structured feedback in the context progressive approaches to assessment - Yorke (2003); Butler and Roedige(2008)
As a tutor, I want to be able to highlight any area of a student's text, and label it in accordance with a progress score marker from their previous academic work relating to the conventions of that academic writing genre, so that I can ensure that students can, over time, identify how they have developed specific aspects of their writing practice. This change would affect the multiple areas.	[Student:] I just feel like we're owed more feedback. I feel like it should be taken more in depth	feedback culture; feedback for learning; human vs. machine	Semi-automated feedback as part of a progression cycle - Yang (2011); feedback as formative process - Williams (1998); revision of writing as part of feedback cycle - Deane *et al.* (2008); knowledge economy - BIS (2016b)
As a student, I want to be able to see machine-generated statistics on the rates of error to do with grammar and punctuation, so that I can understand the rate of basic errors in my text, and gain some understanding of where I can improve or have improved. This change would affect the front-end feedback entry area.	[Student:] I don't think we've got it yet, but there is a sort of a grammar checking tool that you could get … so I think that that could be beneficial on certain levels as well	surface-level feedback; human vs. machine	Possible use of semi-automated technology to promote progression of student learning - Wingate *et al.* (2011);Yang (2011)
As an administrator, I want to toggle the settings as to whether a student can see all available tutors and decide who to send it to, or whether to make the system a "black box" where tutors' details are blocked from students' front-end interfaces, so that I can add a layer of choice to the process. This change would affect the entire system, or multiple areas.	[Student:] The major theme [for me] is about human interaction. … all this technology isn't preparing us for when we graduate.	human vs. machine	feedback process is most effective when all the protagonists are actively involved - Taras (2003)
As a student, I want to upload a photo, a short biography, and information concerning the course I am studying, and the subjects I am most interested in – as well as some description of my general long or short-term goals for my education and career – so that I can help my tutors fully understand my particular needs. This change would affect the account changes area.	[Turnitin] is just so dehumanising	human vs. machine; feedback culture	pedagogically enabling students and empowering students - Chew and Jones (2009); connecting feedback to personal goals as pedagogically valuable - Rolfe (2011); Saint, *et.al.*, (2015)
As a tutor, I want to, upon receiving work from a student, see a student's course information (if they supply it), a quick history of their account, their previous work, their previous error rates, and their previous feedback of other tutors, so that I can provide students with a tailored response to their work. This change would affect the account changes area.	[Turnitin] is just so dehumanising	human vs. machine; feedback culture; feedback for learning; self-efficacy; how tutors use it	pedagogically enabling students and empowering students - Chew and Jones (2009); connecting feedback to personal goals as pedagogically valuable - Rolfe (2011)

The results from the focus group data further suggest that students perceive Turnitin as software that traditionally is aimed at "catching them out", as opposed to a platform that can signpost developmental aspects of their learning; aligning software parameters with learning outcomes, and working to support the feedback process, would encourage new and possibly innovative ideas around impact and reach of online feedback. Software that can create a feedback audit, and safely store student feedback across modules and years of study, would greatly enrich the use of feedback for learning and serve to facilitate student engagement with the feedback process. Future research would do well to interrogate the features embedded into software such as Turnitin, and question how online feedback needs to develop to ensure that software works to enhance the learning process and not necessarily detract from it.

Publication 5

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Research Article

Peer mentors' experiences and perceptions of mentoring in undergraduate health and sports science programmes

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Peer mentoring schemes are increasingly visible within professional practice, and in recent years, universities have integrated mentoring across undergraduate programmes. In order to provide the appropriate support to peer mentors and contribute to the future development and success of peer mentoring schemes, it is necessary to investigate not only the benefits afforded to mentees, but also peer mentors' perceptions of their experiences. This small-scale qualitative study was conducted with participants who were recruited from the peer-mentoring scheme across two professional undergraduate health programmes: Podiatry and Sports Therapy. Semi-structured interviews were used to explore the early experiences and expectations of being a mentor, mentorship activities, reasons and personal narratives for becoming a mentor, and the effectiveness of the training they received. Findings suggest that constructive and destructive friction exist between how mentors perceive their mentorship role and the strategies and skills they develop and use during their mentorship experiences. The study concludes with recommendations for new mentors and implementation of mentorship schemes within the widening population context of higher education.

Keywords: Peer mentoring; Expectations; Mentoring experiences; Professional health programmes

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1. Introduction

In recent years, peer-mentoring programmes have been embedded into undergraduate courses to support first year students at the start of their academic life (Bayer, Grossman & Dubois, 2015; Heirdsfield, Walker, Walsh & Wilss, 2008). With the ever-changing student demographics, which include increased populations of racial and ethnic minority students as well as mature students, who have been out of education for a number of years, it is important that support mechanisms are implemented early to ensure a sense of belonging within the university environment (Glaser, Hall & Halperin, 2006). Those who feel they do not fit in, have difficulty settling at university (Kane, Chalcraft & Volpe, 2014; Christie, Munro & Fisher, 2004). According to Heirdsfield et al. (2008), students may experience feelings of isolation and uncertainty in making the complex transition to

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higher education environments. These transitions often require a degree of independence and autonomy, coupled with a practical understanding of educational technologies and the ability to balance academic workload with external commitments such as family life. This has significant implications for progression to the second year and successful completion of the degree programme. Peer mentoring is one intervention, which if designed and administered effectively, can bridge the gap between the feeling of wanting to leave and the sense of belonging to a new higher education culture (Heirdsfield, et al., 2008). Whilst the majority of research on peer mentoring has examined the impact of mentoring programmes on mentors and mentees alike, there appears to be limited research that has fully explored how mentors perceive their role and experiences during mentoring. The present small-scale study investigated the experiences of student mentors in two mentorship programmes that took place at the University of East London (UEL), School of Health, Sports and Bioscience.

1.1. Literature Review

The theoretical framework for this study includes the context of UK higher education, the literature on peer mentoring programmes, and peer mentorship within the field of health sciences. It also involves relevant learning theories as they relate to peer mentorship schemes, keeping in mind that learning occurs not only with the mentees, but also the mentors. It culminates with the research questions the study sought to answer.

1.1.1. The UK and UEL context

Prior to the Further and Higher Education Act of 1992, the vast majority of undergraduate students entered a UK university after 1-3 years of coursework (in specific fields of study) at a sixth form school/college that prepared them for a series of standardized exams called A-Levels. Before 1992, alternatives to university study included, but were not limited to, obtaining vocational/trade certifications from a polytechnic institute or other BTEC (Business and Technology Education Council) college. In response to the call to increase the enrolments of students between 18-30 years of age, the UK Parliament passed legislation that converted most polytechnics in England and Wales to what are known as "modern" or "post-1992" universities (Archer, 2007). The idea was to widen participation to populations of students who were more likely to attend a local polytechnic earning work-related qualifications than spend their limited resources studying for the A-Levels (Archer, 2007; Christie, Cree, Mullins, & Tett, 2018). Although, higher education experiences are considered to transform lives and improve society by developing engaged citizens who make a valuable contribution to a nation's wellbeing, Brabon (2017) explains that the uneven nature of access to higher education is a primary inhibitor. Many of these post 1992 universities recruit students from their local neighborhoods and accept a wide variety of qualifications in addition to traditional A-level exam scores (Archer, 2007).

UEL was a polytechnic institute with roots in the County Borough of West that extend back to 1892. Now a part of the London Borough of Newham, UEL is comprised of three campuses: Stratford, University Square, and Docklands and seeks to serve the higher educational needs of these culturally diverse East London communities. From 2015-2018, it has had a consistent undergraduate student enrolment of approximately 12,000 students with "the largest percentage of students of any full-range London university coming from areas of multiple deprivation and from BAME (Black, Asian, and minority ethnic) backgrounds" (UEL Annual Report and Financial Statements, 2018, p, 8).At UEL, addressing progression and completion rates includes developing, implementing, and monitoring interventions and support services that address retention and progression rates during the first year of undergraduate study. Many of these interventions relate to student engagement and their ability to overcome academic and personal obstacles. Student engagement particularly within a UK context is one of the primary impact metrics used to assess the quality of higher education provision.

University accountability for the success of its students in relation to widening participation and social mobility has been a topic of interest in recent UK government agency reports.

Specifically, the sharp increase in diverse student populations and the provision of relevant support services was a topic of interest in a 2017 report by the Higher Education Funding Council for England (HEFCE). HEFCE noted a disparity in UK Higher Education in terms of teaching quality and student support, and factors such as widening participation, inclusion and social mobility. In other words, previously marginalized and excluded populations had gained access to a university degree, but support for overcoming obstacles, including a sense of belonging and a sense that academic success was achievable, lagged behind. The student transitions literature advocates that institutions encourage belonging so students can feel part of the university community and become accustomed to the university culture (Chow & Healey, 2008; Kane, Chalcraft & Volpe, 2014). Students' connectedness to the university and their identity of 'being a student' has the potential to impact their commitment to studying and development as learners (Scanlon, Rowling & Weber 2007). Thus it is accepted that students' perceptions of how welcoming a university is, can have a significant impact on their perceptions of their learning experiences (Hamshire, Willgoss & Wibberley, 2013) and their 'will to learn' (Gilles & Wilson, 2004).

As a result of the 2017 HEFCE report, universities have been tasked by various UK government agencies to extend support and outreach initiatives in order to improve and report on student progression and retention rates in light of their negative effects on social mobility. UEL has established several support mechanisms and interventions at an institutional level (shared across the three campuses) and in response to individual programme needs. This research was conducted with volunteer mentors who were part of a mentorship scheme in two programmes: Podiatry and Sports Therapy.

1.1.2. Peer mentoring

Peer mentoring programmes can be developed and structured in multiple ways, but to be effective certain characteristics need to be implemented. These include the mentor, and mentor selection process, the size of the mentoring group, a mentorship programme co-ordinator, and flexibility in delivering the programme (Rolfe-Flett, 2000). Peer mentorship schemes usually involve 2nd and 3rd year students who act as mentors to first year students in order to offer support and guidance through the many challenges of the first-year experience (Keller, 2005). In their simplest form, peer mentors play a pastoral role to facilitate the transition into higher education but do not directly help with academic work. Instead, the mentor introduces the mentee to various academic support services, offers support through sharing their own experiences and provides on-going encouragement. In general, mentors contact their mentees to schedule weekly face-to-face meetings in relaxed settings, such as a coffee shop or student lounge. In their more complex forms, peer mentorship programmes may involve small groups of mentees who are assigned a mentor. In this group-mentoring format, the mentor provides revision sessions after a lecture, lab, or seminar. These sessions are used to reinforce learning content, building confidence, increasing motivation, and developing self-efficacy.

McInnis, James, and Hartley (2000) advocate that peer support through mentoring programmes are preferable as they appear to be more effective support strategies during the first year transition. According to Heirdsfield et al. (2008) and Glaser et.al. (2006), peer mentoring does not only provide academic support, but further serves to encourage social inclusion and integration. Drew et al. (2000) found that students often feel more comfortable seeking advice from fellow students especially in the first year. This could, partially, be due to having a reluctance to question or approach an academic staff, or not being able to relate to an academic staff member. Pursuant to this, Drew et al., (2000) suggests that a mentor/mentee relationship could be enhanced by matching mentors with mentees on similar demographics and experiences.

1.1.3. Peer mentoring in health sciences

Mentoring programmes are not just confined to higher education; within professional practice, mentoring schemes are used to provide staff with support and assistance as well as encouraging professional development within a workforce. Over the years mentoring has received recognition within nursing and midwifery and more recently within allied health practice. In the UK, mentorship

can assist with change and help with reducing stress in the medical workforce of the National Health Service (MacLeod & Conway, 2007). It is thought that such schemes benefit not only the mentor and mentee but also the patient (Dancer, 2003). With this in mind it is imperative to provide healthcare students with the opportunity to engage in the mentoring process during their undergraduate studies. This in turn will provide an opportunity to develop transferrable skills, which enhances employment opportunities and also supports new graduates in their roles as healthcare professionals. This is supported by prior research that suggests that peer mentoring benefits both mentors and mentees by enabling the development of transferable skills (Fox & Stevenson, 2006). Potter (1997) found that mentors often develop a deeper understanding of subject matter as a result of engaging with a mentee. A key skill associated with mentorship benefits is the ability of the mentor to develop confidence in their communication with a mentee and assume a leadership role within the mentor/mentee relationship. This is important in a healthcare setting, where understanding clinical expectations, that include leading teams, is paramount. Employers require that recent graduates have the ability to apply the theories and procedures they have learned in their coursework whilst demonstrating a wide range of soft skills. To respond to these employment exigencies, particularly in the health sciences, the design and delivery of curricula have had to change.

1.1.4. Relevant learning theories

A shared goal by students and universities alike is to provide learners with opportunities to acquire sound knowledge of a given discipline and to develop a set of professional skills and dispositions that are valued by the field and are necessary for securing graduate employment. To do so, many educational institutions are changing the way they deliver content, from traditional large lectures towards an emphasis on learner-centred pedagogies that actively engage students in social learning contexts. Social constructivism as described by Vygotsky (1979), emphasizes the social and personal context for learning and learning development. In considering the tenets of the social constructivist framework and exploring the dynamics of the zone of proximal development, it is evident that an individual can enhance cognitive levels by learning with, and from, a more experienced, capable peer. Falchikov (2001), used the term "expert scaffolding" to denote how working with a more experienced peer can facilitate greater cognitive development, through progressive appreciation of how a skill is taught and learned. This aligns with the pillars of social constructivism and positions the social environment as central to aiding learning development. This view is supported in the work of Pitkethly and Posser (2001) who argue that the social environments and adjustment to social issues is the key to success in learning. Failing to adjust to social environmental issues, in addition to the experience of intellectual difficulties, is a significant barrier to progression within a higher education context.

Successful learners must also develop their abilities to overcome these barriers through self-regulation and meta-cognition. Beattie (2000) posits that mentoring enables students to co-construct meaning and adopt a self-regulatory approach to learning. Ten, Cate, Snell, Mann, and Vermunt (2004) elucidate that learning, according to a self-regulatory model, involves an interplay between three learning-process components: cognitive (what to learn), affective (why to learn), and meta-cognitive (how to learn). Support mechanisms for learning and development must address all three components. Both affective and regulative learning activities lead indirectly to learning outcomes, due to the influence on processing subject specific learning material. Self-regulation, according to Vermunt and Verloop (1999) has two important conceptualisations at two different levels of specificity: (1) metacognitive learning, (2) cognitive and affective, which is the more general student-regulation of learning processes. Pursuant to this, the learning activities that students wish to engage are largely determined by the quality of the learning outcomes they attain. To fully engage with a self-regulatory learning model, a delicate balance between guided and self-regulation must be maintained. However, teaching strategies with aims to guide learners and the preferred learning strategies of students are not always compatible. Between students' self-regulation and teachers' external regulation of learning processes, complex interplays may take place. Congruence occurs when students' learning strategies and teachers' teaching strategies are compatible. Friction occurs

when this is not the case. Vermunt and Verloop (1999) referred to this balance as constructive friction, with the amount of support required varying between different students learning needs.

Friction as a concept is widely used in mathematics and science to show how two or more objects exist or learn to co-exist. Friction is not necessarily a negative term but is better understood as a driver for change. In the context of learning, friction is useful to encourage students to seek out, and employ problem-solving skills. Higher Education programmes generally require students to become responsible, self-regulated and autonomous in their abilities to successfully complete the programme of study. Constructive friction may present a challenge for students who are trying to increase their skills in a particular learning or thinking strategy. However, this friction is considered a necessary component as it can facilitate students' willingness to change and develop skills in the use of learning and thinking activities they are not inclined to use on their own. Vermunt and Verloop (1999) further argue that self-regulation and constructive friction develop along a continuum of mastery from students' lack of understanding and insufficient mastery of a skill to being able to use skills and knowledge independently and spontaneously. Yet, for some students achieving the balance (constructive friction) between self-regulation and guidance in learning remains a challenge (Ten, et al., 2004).

These perspectives on teaching and learning add weight to how peer-mentoring schemes can support and enhance not only transitions into Higher Education, but also (and possibly more importantly) the social issues that encompass the Higher Education experience for many students. Similar to the constructive friction that learners experience as they work with their teachers to recognise what, why and how to learn, mentors may have to learn how to manage and navigate the constructive friction between personal objectives, goals, and commitments in order to support the objectives they share with their mentees.

With these relevant learning theories, the benefits of peer-mentoring schemes, and the current context of higher education in the UK in mind, this research sought to address the following questions through identification and coding of concurrent sub-themes:

1. How do peer mentors perceive their roles within the mentorship scheme?
2. What challenges do peer mentors encounter and how do they overcome these challenges?
3. How effective is the training mentors receive?

1.1.5. The peer mentorship scheme at UEL

The peer-mentoring scheme at the University of East London (UEL) was introduced into the Health, Sports and Biosciences Undergraduate Programmes in September 2013, beginning with Podiatry and later extending to the Sports Therapy Programme, where first author of this article has been a lecturer for 7 years. The UEL scheme is divided into two key schemes: 1) peer and 2) Peer Assisted Student Support (PASS) mentoring. The first involves a pastoral facilitative mentoring approach where mentors meet with their mentees regularly to offer support and encouragement. Mentors can choose to meet the mentees individually or within small groups of 45 mentees. The second requires the mentor to deliver a small revision session to a group of mentees following a lecture or academic activity. This study focusses on both types of group mentorship schemes.

Students who expressed an interest in peer mentoring were invited to attend a training session. The session was led by the peer mentoring scheme co-ordinator, who was a non-academic member of staff, and was used to elicit information from the attendees about their experiences and

expectation of mentoring whilst simultaneously explaining the roles and responsibilities of the mentors. The training differentiated acceptable and unacceptable behaviours and communication. Embedded into the training was a clear framework for reflective practice and noting of experience. Mentees received similar training so that expectations could be matched and managed. Mentors had access to an on-line portal wherein they could record their meetings and document issues arising. The Sport Therapy & Podiatry academic leads for the peer-mentoring scheme were able to access the portal and review the documents. This was important in terms of directing and supporting mentors through the scheme and mentoring process, as well as signposting developmental opportunities such as workshops and seminars to address deficits in the scheme's objectives. The scheme commenced within the first academic teaching week, as it was important to ensure that peer support was available at the start of the academic year. All mentors were asked to avail their time for an hour. Mentees were matched as best as possible with mentors. The matching criteria were: gender, culture, age, and socio-economic factors.

2. Method

2.1. Participants

This small-scale study used a qualitative design. A purposive sample of 12 participants was recruited across two professional health programmes: Podiatry and Sports Therapy. All 12 participants had previous experience of mentorship as first year mentees. Table 1 provides an overview of their age, gender, year of study and type of mentoring scheme.

Table 1.
Mentor Demographics

	Sports Therapy	**Podiatry**
Number of participants	6	6
Average age (age range)	25 years old (19 – 35)	30 years old (23 – 44)
Gender Female	3	5
Gender Male	3	1
Year of study		
Level 5	4	6
Level 6	2	0
Type of mentoring		
PASS leader & peer mentor	5	2
Peer mentor	1	4

2.2. Data Collection

Semi-structured interviews with open-ended questions were designed to explore the early experiences and expectations of being a mentor, mentorship activities, personal narratives for becoming a mentor and training received. During the semi-structured interviews, held at two critical points within the academic year, namely the start of the year and midway through the second semester, participants were asked to describe their mentorship experiences by reflecting upon their opportunities and obstacles.

2.3. Data Analysis

Data analysis was conducted concurrently with interviews as the analysis of interview transcripts informed the revision of questions and enabled the researchers to refine the question stems (Charmaz, 2003). Grounded theory and thematic coding (Gibbs, 2007) were used to explore links between themes by relating responses back to theoretical perspectives. The research team also used

a form of template analysis as they coded transcripts. King (2004) describes template analysis as a set of techniques for thematically organizing data. Some of the themes can be a priori though modified and interpreted by the researchers. Data were coded independently and then discussed during meetings to share interpretations, reflect on the process, and develop the emerging themes further. To address issues of validity, member checks were conducted by asking the participants to review the transcripts for accuracy.

3. Results

Pursuant to the data analysis techniques described above, the richness of the mentors' responses made it possible to examine clusters of patterns and assign specific tags to better describe and conceptualise their narratives. The researchers coded and tagged each response to identify primary themes. This resulted in five primary themes that emerged through the process and related to the research questions concerning, perceptions of being a mentor, challenges of mentorship and training:

- Becoming a mentor
- Belonging and connecting
- Alignment of relationships
- Benefits and boundaries
- Navigating challenges

Figures 1 and 2 illustrate the theme classifications between the two programmes (Podiatry and Sports Therapy) and by gender.

It is interesting and evident, that the sports therapy mentors aligned the group mentoring experience as one of navigating challenges, belonging and connecting and wanting to become a mentor. In contrast the podiatry mentors saw a greater affiliation towards aligning relationships and weighing up benefits and barriers. In terms of gender specific differences, the sports therapy male group, rated highest on 3 of the 5 categories, with benefits and barriers significantly higher than the other groups.

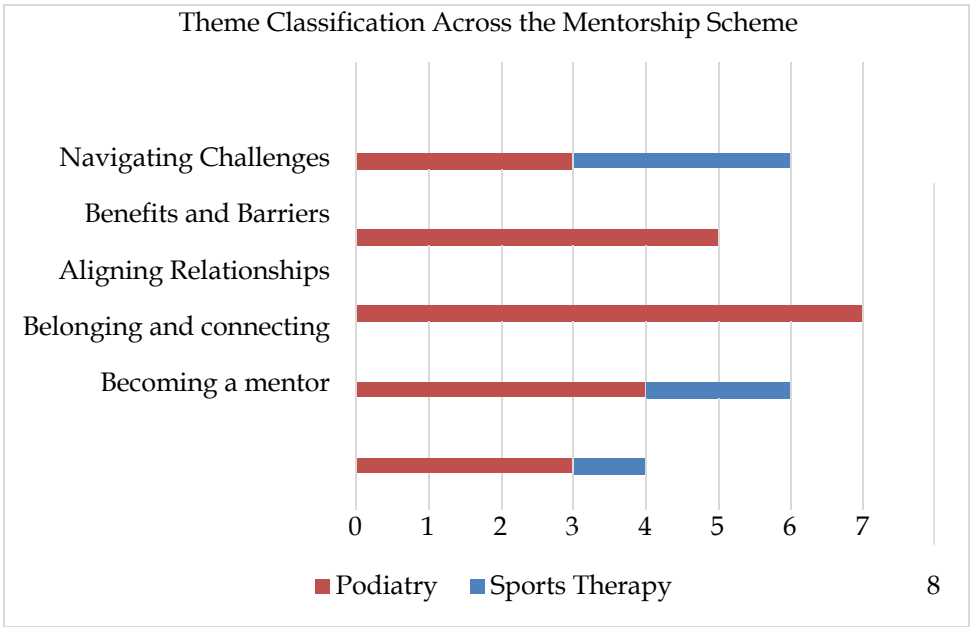

Figure 1. Theme classification between Podiatry and Sports Therapy Mentors

Further analysis resulted in collapsing two of the themes, Benefits and Barriers and Navigating Challenges into one Benefit and Challenges. In the following sections, the supporting evidence for each of the four themes is provided.

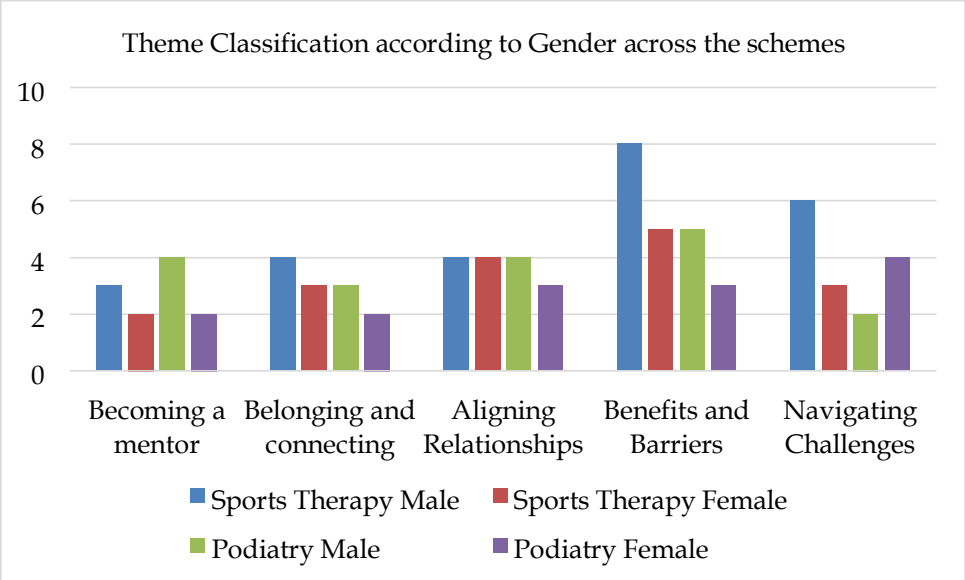

Figure 2. Gender differences across themes between the two mentor cohorts.

3.1. Perception of being a Mentor

3.1.1. Becoming a Mentor

The first theme to emerge from the data was related to reasons for becoming a mentor. One expected finding was that the participants' reasons for becoming a mentor related to their professional goals. One participant described himself as wanting to become a mentor because "it will look good" on his CV. It is interesting that the majority of the participants were positive about becoming a mentor and the impact of their mentorship on their mentees development and academic experience.

Many of the participants explained that becoming a mentor was born out of a desire to support and help other students often arising from being mentored in the first year.

> *"I found being a mentee last year really useful especially in terms of knowing what was coming up and what to expect. Understanding expectations from the lecturers and also helping me prepare for exams and placement. Just getting that advice from someone who has been through it already and that they are approachable as well".*

As healthcare students there was evidence that some participants saw the mentoring experience at university similar to the practitioner-patient mentoring relationship.

> *"Since treating patients as a student podiatrist I have realised I am the patient's mentor. Explaining to the patient in simple terms their treatment options, and trying to motivate them to do the treatment interventions we provide, is how I would want a mentor to speak to me so that I can understand things and feel motivated. I think being a mentor will help me interact and understand patients better''*

The mentors also noted that being a mentor is controversial, as support does not equate to teaching or imposing one's personal goals on the mentee.

> *"I find myself often frustrated as I set goals for my mentee, arrange meetings, try and support him the best I can, but have now realised I can't impose my will on another person, as we are not the same. I struggle, at times, to confine my role to supporting and not teaching my mentee. I just want to share my experience and help him understand the expectations necessary for success at university".*

Participating in the mentorship scheme profoundly changed the way some mentors think about mentorship, a sentiment other mentors shared (Keller, 2005). One participant speculated that mentorship could be problematic and troublesome, alluding toa conflict between their experiences and expectations. This dissonance was evident in another participant's comments about the anxiety of becoming a mentor.

> "*I am not sure my mentee is ready for me and I for her, will I be able to cope with emotional overload?*"

Some of the participants were troubled by not being able to effectively fulfill the remit of being a mentor and having to disband their mentorship experience. For example, one participant described his experience as a bridge into the unknown, "*no-one can truly know how you feel until you are too far gone within the journey and decide it is time to leave*". This view was shared by other mentors who claimed that investing too much time and energy could negatively impact their own study and attainment. Whilst others suggested that too much involvement could be detrimental to their health and future aspirations.

3.2. Challenges of Mentorship

3.2.1. Belonging and Connecting

The second most prevalent theme to emerge was belonging and connecting. It was difficult to isolate this theme as it tended to permeate the experiences of the participants as a whole. Some mentors tended to feel a sense of connection with their mentees, whilst others felt distant and found it difficult to communicate and interact with their mentees. One mentor described their realisation that their mentee did not fully engage with the process and there was a tangible disconnect between roles of mentor and mentee. This led to heightened tension in the relationship and a sense of isolation. Consequently the mentor decided to leave the scheme, citing a loss of self-worth and disempowerment in positively influencing their mentees. These sentiments were partially observed in other participants who questioned the purpose of the experience in terms of expectations.

> *"I became a mentor as I wanted to connect with students to encourage them to study hard and plan work early. I have realised that not everyone has my expectations and sometimes feel annoyed that my mentees are not working efficiently''*

The ability of the mentors to connect with their mentees in order to support their development of a sense of belonging within the culture of higher education varied. This was at times attributed to differences in age of cultural background. Even though mentees were matched to mentors with similar socio-cultural backgrounds, most of the mentors attributed a high investment in personal time to support their mentee, describing conflicts in sociocultural and maturational domains. One participant, a mature female playing multiple roles of being a mother, wife, student, health professional explained her predicament of not fully understanding her mentees background and not sure whether the mentee appreciated her background.

> *"It is difficult to understand if my mentees understand me as a student, or see me as part of the teaching staff. I come from a cultural where education is highly valued. There is simply no time for messing around. When I see my mentees not fully engaged in the mentorship process it annoys me".*

This mentor was proud of her influence on her mentees but questioned whether an informal assignment of mentor to mentee would be more beneficial to the working relationship. This was supported by other mentors who spoke of differences between their personal life and the life of their mentees. The dynamics of formal versus informal assignment of mentors to mentees is explored, in part by, Sambunjak, Straus & Marusic (2010). There appeared to be unexplored cultural differences that had the potential to either impede of enhance the mentor-mentee relationship.

When exploring culture and social enterprise as a sub theme, there were interesting dynamics within the mentor group. Some mentors explained their experience as learning to motivate and accommodate their mentees' needs as well as staying focused and motivated. They said things like:

> *"I've actually enjoyed it but I've found it harder than what I was expecting. I think the two people I am mentoring come from a similar background to me and they are mature students and they are on the ball in terms of how to access the university services but what I found difficult was that the sessions making them useful to them because they were so on the ball. There big issue was time management and managing their studies around, having children so I found the first two sessions we were going over the same things. I wanted to feel like there was a point to the sessions and they weren't just coming to the session because they were arranged. So how to motivate!"*

Creating meaningful sessions was sometimes problematic because it required an alignment of conflicting expectations and goals across cultures and generations (i.e. age). Several mentors identified a lack of congruence between their expectations and experiences with the role. This dissonance between competing demands in higher education mentorship schemes is not unusual as there is frequently a disparity between expectations and actions and possible emerging conflicts between mentor and mentee. Nevertheless, these findings indicate areas of concern for implementing successful mentorship schemes.

On closer examination of the coded transcripts, it is possible that these competing values between being a mentor and mentee are the true value of the scheme, enabling both mentor and mentee to accommodate new experiences and work towards the development of skills that they may not otherwise have developed or used on their own. One participant described the value of mentorship by reflecting on the development of her interpersonal communication skills.

> *"My communication skills have improved as I really have to dig with my peer mentees to find out if there's anything bothering them. They are the kind of people who will just get on with it. Then it gets close to exams and they panic and then they send a message saying please help. I really have to dig to find out how they are doing and helping them belong''*

From this evidence, mentorship appears to be a paradigm of connecting and disconnecting and enabling self-growth through mutual respect. It is a dynamic relationship where the mentor is focused on making connections with the mentee, who is seeking a connection and sense of belongingness and academic success at the university. Each is navigating their own constructive friction between their expectations and the realities of the roles they are tasked to fill and relationships with which they find themselves. It is evident that through these mentorship schemes, both mentor and mentee learn to grow individually and collectively, by reflecting on personal objectives, growth, and outcomes. This culminates in a network to establish communities of practice, where relationships exist in varying states of friction and alignment.

3.3. Aligning Relationships

Through the interviews, it became apparent that successful mentor experiences rested on positive interactions with their mentees. The role of being a mentor was played out in terms of how mentors work to plan their group mentor sessions. When exploring how mentors developed their mentee sessions, a few participants spoke of having established a clear structure with their mentees.

> *"Most of the time I like to structure my sessions. I will email them and tell them we are mostly going to focus on like OSCE preparation or something"*

Others placed responsibility for arranging sessions on their mentees.

> *"I've sort of left them to it, to be fair I felt that if they needed me they could always email me or call me".*

Closer examination of these findings indicated a clear difference between mentors within and between the two health programmes. The podiatry mentors tended to rely more on structure and

coordinated sessions, whereas their sports therapy counterparts used a more informal approach to arranging and monitoring sessions.

The initial interactions between mentor and mentee in the early stages of the scheme indicated differences in how the mentors felt their mentees viewed them. For example, it was clear in a mentor's comments that she cared about how others saw and responded to her.

> "*Being a mentor is a challenge, it involves careful planning and thinking about how my mentees perceive and understand me.*"

It was clear that being an effective mentor was also based upon personal experiences as a former mentee.

> "*I wanted to be a mentor so that I could give my mentee a better experience than I experienced with my mentor*".

The alignment of relationships between mentor and mentee is complicated. As one participant suggested, mentorship is a two-way process and both parties need to benefit from the relationship. However, this two-way process often pushed the mentors to think and act differently than they had previously anticipated.

Several mentors described how participation in the mentorship scheme caused paradigm shifts in relationships and often promoted creative thinking to resolve complex issues. Closer analysis of the interview transcripts found that 32% of the mentors reported how engagement with mentees enabled them to rethink their role as mentors. This led to a positive shift towards focusing on asking their mentees different questions to facilitate self-regulation and not merely providing them with the answers. At times, this was a source of additional friction between what the mentor perceived as their role and the reality of the interactions they shared with their mentees. One participant noted:

> *"I am often caught between what I know I can do to help my mentees and what I am expected to do as part of a scheme. The scheme may be a barrier to enhancing the mentor-mentee relationship. I think the scheme needs to be more flexible and give the mentor greater power in supporting the mentee through their studies"*

In this circumstance it appears that the mentor is questioning the remit of the mentor and is doubtful, or perhaps less confident about the expected relationship between mentor and mentee. In some cases, mentors relied on the training they received to address this area of friction between expectations and realities.

> *"Through the training I realised I am part of a bigger support structure and need to understand that I am merely a critical friend, facilitator, and I guess a more experienced student. In this light I am geared to offer advice and support but nothing more. If things get too intense I need to refer my mentee to the support Hub"*

The thread of friction is inherent in the mentor-mentee relationships and explicit in mentor comments, which appear to describe the relationship as troublesome. One mentor reported such conflict as an inability to fit into her mentees world.

> *"I struggle at times to fit into my mentees worlds. I do not share the same experiences and worry that my mentees do not fully understand my journey''*

The mentor-mentee spectrum of relationships may not necessarily change how schemes are developed, but do certainly change perceptions between what a mentor and mentee become.

3.4. Benefits and Barriers - Navigating Challenges

Despite the varying alignment in mentor-mentee relationships, there appears to be inherent benefits in deciding to support another student's development. One participant spoke of the positive impact in helping the mentee revise her anatomy work.

> *"I think the last two sessions they have been talking about anatomy and physiology modules as they find them difficult so we have been going over some of these topics and that's gone well. It's good for me too because it goes over my kind of first year knowledge and I can see how I have developed from first year to second year. I feel reassured that I know more than I think I do and I have retained more''*

The positive academic impact involved a deeper understanding of content knowledge as well as skills and strategies. This was stated more explicitly by another participant who said

> *"By helping my mentees revise their work, I too revise my prior learning and learning to examine the subject matter more intensely. This has led to me better understanding concepts I missed the first time around."*

Others described their mentorship experiences as changing their understanding and providing effective student support and the skills necessary to successfully do so.

> *"Becoming a mentor has enabled me to facilitate learning and support student learning. Initially I wanted to teach my mentee, but learned, through constraint, that my role is pastoral and supportive. I now appreciate knowing how to support others ..... Self satisfaction, like professionalism as well. At the beginning when I approached my mentees it had to be in a formal way and emails had to be in paragraphs, you know the way I am writing. It's because we had a session with peer mentoring coordinator and the training she made it clear about how to approach them. Obviously now it's been a few weeks and bit more comfortable with them but at the beginning I had to make sure how to approach them. The age difference with one guy was different to the other so I was mindful of that''*

This mentor went on to identify the complexities of mentorship, by reflecting on their experiences as mentor and mentee, relating her mentee experience to that of her mentor's role. The mentorship experience allowed mentors to learn more about themselves, ask questions about the value of their personal contributions towards the success of the scheme, and challenge assumptions about their expectations and experiences.

Mentorship may mean different things to different individuals but what is mutually accepted is that the process is facilitative and supportive. It involves a transformation from being a student to learning to become a positive influence in another student's life. The process celebrates achievement through enhancement of the student learning experience.

Nevertheless, this dichotomy in process has the potential to create boundaries, and often isolation if not affectively managed.

> *"I feel I want to teach my mentees and find myself struggling to confine my duty to that of pastoral guidance. I feel I may be over stepping boundaries"*

Here we see the mentor wrestling with conflicting expectations, which may be self-imposed. This is in contrast to the mentor who refers to her training to better understand and appreciate her role. Another participant shares a similar experience:

> *"It is frustrating when I try and teach my mentees and they do not seem to learn or retain the information I share. I feel angry when I plan a session and no one arrives. Why can't my mentees see the value of studying hard. I see myself juggling my workload in order to support them. I tend to be giving a lot with little return. If I continue to give - my studies will suffer"*

These challenges, while significant for some of the participants, provided insight to the benefits and short-comings of the training as well as the scope of the mentorship scheme. Additionally, they served to support other themes and the underlying thread throughout the findings of the friction that existed between mentor/mentees conflicting expectations and goals.

3.5. Training Value and Benefits

The themes are interrelated with a general understanding around the value of training. Mentors reported that the initial and continual training and support received, enabled them to better

understand their roles and develop a resource network for dealing with issues and differing circumstances. The training further supported the mentor's perceptions of mentorship, the resulting expectations, the challenges and barriers to mentoring, and the understanding of developing emotional intelligence and resourcefulness.

4. Discussion

This small-scale study sought to investigate the early experiences and expectations of undergraduate peer mentors who were involved with two mentorship schemes in Health and Sports Science. Participants in this study were second and third year students in a diverse Post1992 university located in East London. Through interviews, this research explored their mentorship activities, reasons and personal narratives for becoming a mentor, and the effectiveness of the training they received. It focused on answering three research questions by analysing data collected at the beginning and mid-point of the academic year. The findings from this study connect to the literature on widening participation in higher education, the research on peer mentorship and learning theories that involve constructive friction as a catalyst for developing skills and strategies that are valued by employers. The findings organized under the three main research questions and divided into sub-themes serve to provide greater insight into peer learning schemes and development.

The first research question is concerned with how the mentors perceived their roles within the mentorship scheme. The findings suggest that while some mentors joined the scheme to enhance their curricula vitae, several indicated the desire to provide new students in their programmes with what they believe is the necessary support and guidance for navigating the exigencies of being a first-year student. Because the mentors in this scheme are former mentees, they perceived their role as essential to helping others achieve a sense of belongingness and academic success, even when it meant being a different kind of mentor than what they had experienced. This understanding of the importance of their mentorship roles during the first year of university study is supported by prior research (Chow & Healey, 2008; Kane, Chalcraft & Volpe, 2014; Scanlon, Rowling, & Weber, 2007), that found a first-year student's ability to connect to the university by developing their own sense of identity and membership in the campus community has the potential to affect their overall academic success. The mentors in this study reflected upon their own experiences as mentees, both positive and negative, and the need to facilitate a successful transition to university study. For widening participation first-year students, this can be a significant and challenging process fraught with feelings of isolation and uncertainty (Heirdsfield et al., 2008).

The data also showed that there was often a conflict, or friction between the mentors' perceived roles and their interactional experiences with their mentees. In some cases this friction lead to personal growth and learning, in areas such as communication, beyond what they may have been able to develop and use on their own. In other circumstances, the dissonance between the mentors' expectations and the realities of their roles was cause for frustration that in one case, led to an early departure from the scheme. As described by Vermunt and Verloop (1999), the outcomes of friction, or the lack of congruence between an expected learning experience and the actual experience, include attaining higher development and use of skills and strategies when the friction is constructive and a decrease in the development of skills and potential growth when friction is destructive in nature. In this study, the friction between the mentors' expected roles and the realities of being a mentor is a significant finding because the data show that some form of friction emerged across several of the themes identified. In cases of constructive friction, the mentors noted they deepened their understanding of their coursework, increased their communication skills, or challenged their perception of what student support is and should do. However, there were also instances where destructive friction led to the mentors feeling isolated and disempowered. In one instance, it led to a mentor exiting the programme.

The second research question is related to identifying the challenges the mentors encountered and how they were able to overcome them. It became apparent that one challenge was in understanding the remit of the peer mentorship scheme itself. For one mentor in the study, the

scheme was not "flexible" enough so that peer mentors can provide additional support to first year students. For other mentors the challenge began early on in the mentorship role due to a mismatch of ages and cultures between mentees and mentors. In both cases the mentors struggled to develop a meaningful, two-way relationship with their mentees, noting reasons such as not having similar academic goals, personal aspirations or general values related to study ethics and communication. These findings are important considerations for the successful implementation of peer mentorship programmes in terms of whether to formally match mentees with mentors who share similar age, gender, and cultural backgrounds (Sambunjak et al, 2010) or to build additional flexibility into the delivery of peer mentorship schemes from the outset (Rolfe-Flett, 2000). For some mentors frustration related to these challenges remained throughout their experiences. One mentor openly expressed feeling undervalued, particularly when mentees did not attend a scheduled session, questioning the mentees' commitment to their own studies and academic success. In this instance, the mentor was not able to determine why mentees failed to attend planned sessions, thus limiting their own satisfaction with the programme and further developing their own mentorship skills and strategies. Aligned with the research (Fox & Stevenson, 2006; Potter, 1997) one of the goals of these two mentorship schemes involved with this study was to enable benefits for both the mentors and mentees alike by helping them develop transferable skills that are valued in the healthcare profession. These skills included, but were not limited to, interpersonal communication, critical thinking, and problem solving. Although the schemes in this study fell short of achieving this goal with some of the mentors, others were able to overcome their challenges and recognized their own personal growth through self-reflection.

It is important to remember that while the first-year mentees were transitioning towards a new identity and membership in the university community, mentors were also undergoing a transformation from being only a student to being a student and a mentor. The data showed that the mentors were acutely aware of this transition, noting the challenges they encountered when attempting to develop trust and openness in the mentor-mentee relationship. This was particularly evident in their comments about oral and written communication strategies. Specifically, one participant acknowledged their own improved communication skills in order to "dig to find out how they [mentees] are doing and helping them belong." Another mentor recognised the need to start with more formal communication in the beginning and to be mindful of any age differences in order to communicate appropriately. The success of some of the mentors and the continued frustration by others can be explained by the work of Vermut and Verloop (1999), who note different outcomes for students who experience constructive friction during a learning activity, such as those that occurred within the mentorship role. While a few of the mentors were able to demonstrate a high degree of self-regulation and further develop and implement transferable skills without guidance from a teacher or trainer, others were only able to partially implement those skills on their own. In a few cases, the mentors in this research were not able to master a particular skill enough to benefit from the friction resulting from challenges they encountered. As peer mentorship schemes progress from initial stages, it is imperative for the tutors or coordinators to recognise that for some peer mentors, achieving a balance between self-regulation and guidance during learning activities (i.e. constructive friction during mentoring experiences), is more of a challenge and may require additional intermediary support (Ten et al., 2004).

The final research question sought to answer the effectiveness of the training the mentors received. Findings indicate that when tasked with initial interactions with their mentees, or when faced with challenging situations, the mentors relied on their training. This was particularly evident when they needed to resolve complex issues that surfaced during their work with their mentees. Being able to address immediate concerns and implement viable solutions in real-time can be challenging and stressful for peer mentors, who perceive their role as an important contribution to their mentees overall academic success. As one of the participants noted, the training helped set boundaries for the kind of guidance mentors were expected to give in each scheme (Peer and PASS). As a result, they had more confidence in determining how best to provide pastoral care, as well as

academic support to their mentees. In post 1992 universities, where widening participation has resulted in larger populations of non-traditional, mature students, having confident, well-trained peer mentors can be critical to whether these students can successfully make the transition and progress towards graduation. The research by Drew et al. (2000) concluded that students are more likely to seek advice from a peer, especially in the first year. New students who are not able to relate to their lecturers on a more personal level are more reluctant to ask them for help. Therefore, peer mentorship schemes that operate within the same academic programme and that match mentees and mentors based on similar demographics are recommended (Drew et al, 2006; Sambunjak, et al, 2010).

6. Conclusion

Whilst the majority of research on peer mentoring has examined the impact of mentoring schemes on mentors and mentees alike, there appears to be limited research that has fully explored how students perceive their roles as peer mentors and the implications of these perceptions on their own learning and growth. This study investigated the dynamics, perceptions, and complexities inherent in understanding these concerns, challenges and expectations of mentors within a mentoring environment. Connecting with the literature on widening participation in higher education, peer mentoring, and relevant learning theories to peer mentorship schemens, the study examined important differential markers to better align mentors' experiences and expectations with mentoring impact and success.

Understanding mentors' expectations is necessary in appraising the success of a mentorship programme. Mentors often interact with new students and assist with bridging the transition gap into higher education. This interaction demands time and a commitment and if expectations are malaligned or mismanaged the consequences could be devastating for both mentor and mentee (Le Cornu, 2005). This raises important pedagogic as well as philosophical questions around mentoring relationships and embedded, as well as perceived benefits, of mentoring. It further offers critique around whether significant differentiation in mentoring training--i.e. content and application needs--should be consider against level of learning. This is supported by the idea of constructive friction (Vermunt & Verloop, 1999) that recognizes the delicate balance within the scheme between guided support and self-regulatory learning. Findings from this study support the need to embed a theoretical perspective of learning theories relevant to mentoring into the training mentors receive. This has the potential to better prepare mentors for their roles, dispel myths about the mentorship process, support and challenge the complexities within a mentorship programme, and help mentors contribute positively to the first year learning experience.

6.1. Implications

The researchers acknowledge that this study is limited to two cohorts of mentors selected from two programmes within the same school with similar curriculum and context. They do not know whether these findings could be extrapolated to reflect a wider group mentor experience. How do mentors within an institution respond to the demands of the role and the expectations laid before them? Future studies could take up these questions by considering the evolving higher education landscape.

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Repositioning SoTL toward the T-shaped Community

ABSTRACT

Amongst a range of changes that have taken place within tertiary education, perhaps the most revolutionary has been a shift to student-centred approaches focused on lifelong learning. Accompanying this approach to holistic higher education (HE) has been a growing interest in, and understanding of, the Scholarship of Teaching and Learning (SoTL). SoTL has, at its core, a deep concern with student learning, and is therefore well-aligned with HE's renewed focus on its students. In this conceptual paper, we examine the impact of the 'T-shaped person' which many tertiary institutions are using as a concept to inform and connect the development of students' deep disciplinary knowledge with non-academic and employment readiness skills (such as communication, problem-solving, teamwork, and critical thinking). Importantly, we argue for a repositioning of SoTL to complement and support this model, with SoTL forming both the fulcrum and the fluid, multiple threads of discourse that are intricately entwined around the structure of the T-shaped model. We encourage our colleagues to strive to be T-shaped practitioners, and we cast a vision of a T-shaped community. Here, all stakeholders within HE connect both their academic knowledge and holistic skills in collaborative ways to produce learners who flourish in modern society. The SoTL community plays a pivotal role in achieving this vision and is well-positioned to expand the current notion of SoTL to allow it to play a more holistic, interconnected, central role in HE.

KEYWORDS

Scholarship of Teaching and Learning (SoTL), student connections, learner centeredness, T-shaped model

INTRODUCTION

Historically, universities have been perceived as bedrocks of constancy and tradition; however, in the past half-century, global higher education (HE) has undergone many complex changes. HE faces a very different landscape, with advancements in technology, variations in student populations, and changing requirements within curricula and institutions (Ren, Zhu, and Warner 2017; Wooley 2013). The recent coronavirus (COVID-19) pandemic of 2020 has also forced our institutions into a state of constant change. David and Naidoo (2018), Van der Zwaan (2017), and Zaida and Rust (2016) propose four categories of change: cultural, structural, technological, and ideological. These changes are in response to worldwide trends that include globalization, technology, demographic shifts,

environmental sustainability, internationalization, decreased economic funding, and increased legal pressure.

In this era of accountability and quality-assessment practices, HE's public standing and purpose in society has been significantly altered (Finkelstein and Jones 2019; Goldstein and Otte 2016). Structural changes include those of student profile/demographics (aging population, non-traditional students, part-time learners, etc.); the explosion of alternatives to four-year degrees (competencies, badges, certificate programs, etc.); the rapid increase of branch or satellite campuses, particularly in Latin America and the Middle East (Cantini 2016); and increased social stratification worldwide. Ideological changes are seen in the corporatization of HE and the application of business models (Altmann and Ebersberger 2013), increasing expectations and demands along with decreasing funds (Finkelstein and Jones 2019), problems with equity and access (Mountford-Zimdars and Harrison 2017), and issues of sustainability and environment. Obvious technological changes focus on mediums of learning, such as online, blended, and massive open online courses (MOOCs), as well as the growth of new disciplines such as integrated intelligence and digital humanities (Aoun 2017). HE also faces increased legal pressures, such as those related to compliance, harassment guidelines, accommodations, unionizations, and governance models (Meeuwse and Mason 2017). Changing fads (the new, shiny object syndrome) influence universities' constant improvements, including strategic management, technological upgrades, minority leadership development, and business practices, all affecting tertiary education in their wake (Altmann and Ebersberger 2013).

Recent international paradigm shifts toward learner-centeredness are pressuring HE to move away from academic-focussed models toward a holistic and life-long learning model, that would enable continued learning and intellectual flexibility over the student's lifetime (David and Naidoo 2018; Zaida and Rust 2016). This new mandate implies that HE must develop graduates with discipline-specific mastery who are also prepared "in terms of knowledge, capabilities, and personal qualities" (Kuh 2008, 2) to take on real-world challenges, including any combination of economic challenges, personal issues, and political transitions. This approach will enable our graduates to thrive in a fast-changing economy and in "turbulent, highly demanding global, societal, and often personal contexts" (Kuh 2008, 2). These learners will adapt to new environments and recognize, collate, apply, synthesize, and integrate knowledge from different sources to continue learning throughout their lives.

To answer this call, one of the most significant areas of focus in today's tertiary education settings is learner-centerd pedagogies and the concern of fostering both employable and civically prepared graduates. HE must recognize the concept of "the essential integration of personal development and learning" (Keeling 2004, 5) in each discipline. Moreover, Goldstein and Otte (2016) note that change is occurring in pedagogy due to the science of learning research. Current research in learning suggests networks and connections need to be made across contexts and retrieved over time for effective learning (David and Naidoo 2018; Joos and Meijdam 2019). In addition, learners fare better when they believe in their ability to succeed (Dweck 2006).

Considering students holistically lets educators provide them with opportunities to take ownership of their learning, and further develop problem-solving mindsets. HE traditionally is concerned with preparing students from an academic perspective; however, preparing students for life's challenges is an emerging theme. In this paper, we present a model that argues that practitioners' movement toward learner-centeredness in HE creates an opportunity to apply SoTL in a new way.

CURRENT POSITION OF SOTL

In a seminal work published in 1990, Boyer proposed expanding the definition of scholarship beyond that of research and envisioned how teaching must prepare students for life-long learning. Although not explicitly referring to it as the scholarship of teaching and learning, Boyer (1990) nonetheless considered teaching and learning as inextricably linked, describing the scholarship of teaching as "a dynamic endeavour" that "builds bridges between the teacher's understanding and the student's learning" (23). Boyer (1990) challenged how academia conceptualized teaching and learning and attempted to redefine the language of teaching by raising the value of excellence within the academy. He argued that "the work of the professor becomes consequential only as it is understood and applied by others" (Boyer 1990, 23). Whilst it begins with what the teacher knows, teaching must "encourage students to be critical, creative thinkers with the capacity to go on learning after their college days are over" (Boyer 1990, 24). Other scholars followed, such as Hutchings and Shulman (1999), who described the scholarship of teaching as having three central features: "of being public, open to critique and evaluation, and in a form that others can build on" (4). Later, they added a fourth attribute, the involvement of inquiry into and investigation of student learning; by way of example, they explained how Carnegie teaching scholars were expected to undertake projects that "not only studied teacher practice, but the character and depth of student learning resulting from that practice" (Hutchings and Shulman 1999, 13). These works moved beyond simply finding ways of improving teaching practice and toward advancing the teaching profession as a whole.

The value and recognition of SoTL in developing students and graduates is subsumed by an institution's ideological understanding of what a learner is and its cultural practices that express this understanding. Poole (2013) observed that SoTL had taken hold in institutions where it began at the grassroots level, in bottom-up rather than top-down scenarios. In an interview in 2013, Shulman envisioned a future where more and more institutions considered SoTL a cultural norm of the university (Center for Engaged Learning 2014). For SoTL to develop into a robust culture, there must be 'buy-in' and support from faculty (Kreber 2013). Booth and Woollacott (2018) argued for not only support from faculty, but, more profoundly, a mindset change that positions SoTL firmly in a student-development framework.

Notwithstanding the ongoing conversations that position SoTL in a variety of ways, the connections between teaching and learning have long been embedded in the SoTL literature. Trigwell, Martin, Benjamin, and Prosser (2000) and others have envisioned SoTL output as a co-construction of knowledge between teachers and students arising from a learning partnership. Trigwell and Shale (2004) proposed that SoTL should reflect what is valued in teaching and student learning, and thus, should consider students as collaborators and partners in learning.

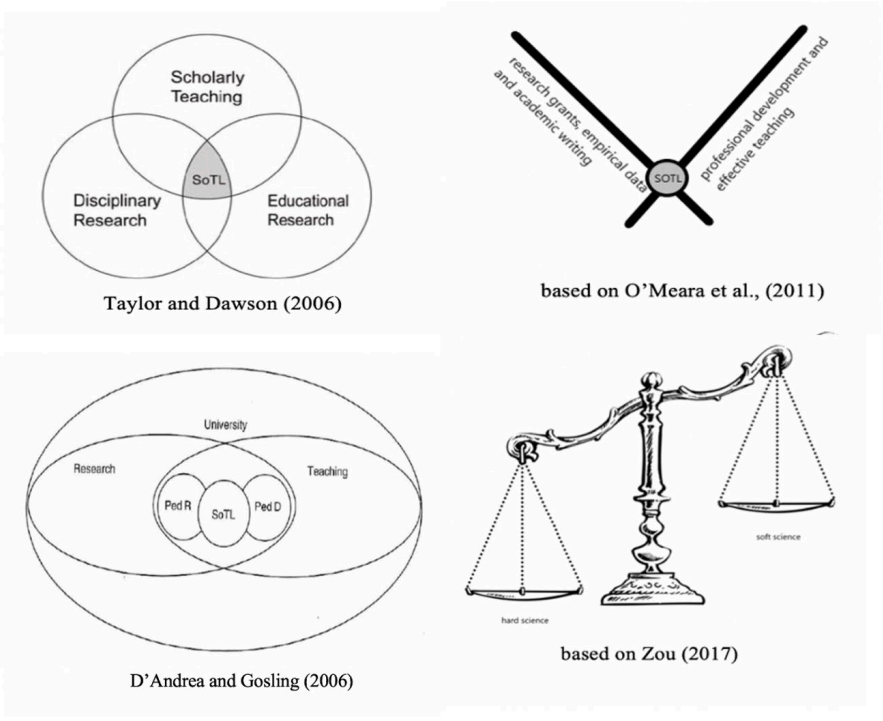
Whilst SoTL has evolved to examine the interrelationships between learning and teaching, there is limited consideration of specific criteria that enable students to develop and flourish holistically within and beyond the academy. Chick, Nowell, and Lenart (2019) conducted a scoping review to assess how SoTL is researched, conceptualized, and portrayed in the literature. The review concluded with the importance of measuring what we know and have, but equally signposting future work toward addressing the real issues within SoTL. Bass (1999) corroborates Chick's views in that his work problematizes SoTL as focused on problem resolution within the classroom. While the classroom

context is important, so too are the developing worlds that students inhabit, and now to which they will need to continue to adapt in the future. The meaning of SoTL varies across subjects, classrooms, institutions, national, and international contexts; however, gaps in the literature remain. Thus, the importance of SoTL in this space between the classroom, the larger university community, and in students' journeys beyond the confines of their degrees still needs to be examined.

SoTL's position and placement in the academic landscape relative to HE research has been the subject of ongoing debate. HE research is defined as "creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of humankind, culture and society—and to devise new applications of available knowledge" (OECD, section 3).

Some literature describes the difference between HE research and SoTL as the difference between hard and soft science (Zou 2017), therefore completely separating the two ideologies so that they run parallel and never meet. Other researchers have described SoTL as a point of convergence and common purpose between two unique and opposite fields: on the one hand, that of research grants, empirical data, academic writing; and on the other, that of professional scholarship and teaching effectiveness that produce positive outcomes for students (O'Meara, Terosky, and Neumann 2011). There are also suggestions that SoTL and educational research overlap in a variety of contexts; for example, as envisioned by D'Andrea and Gosling (2005) and Taylor and Dawson (2006) (see figure 1).

Figure 1. Various depictions of SoTL vs Educational Research



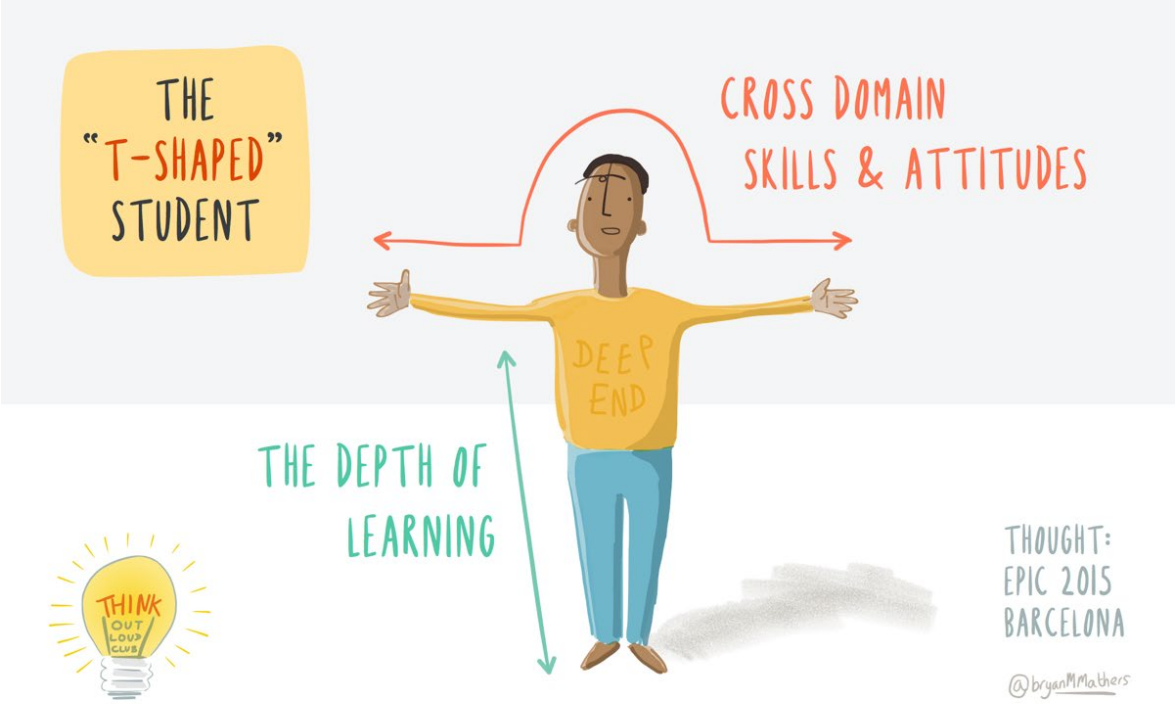
Here, we propose that learning is a continuum and that SoTL has focused far too long on a particular section of that continuum, narrowly defined by traditional concepts of academic learning.

Universities worldwide have started to embrace their responsibilities to nourish the whole student (Baxter Magolda 2009; Jayawickreme and Dahill-Brown 2016; Mayes, Cutri, Goslin, and Montero 2016) as well as foster meaningful connections with society (Lehtomäki, Moate, and Posti-Ahokas 2016; Marquis, Guitman, Black, Healey, Matthews, and Dvorakova 2019). Now is the time to question: How might SoTL have systemic power and reach to influence the types of learners and graduates that HE produces and society needs? We urge the field and SoTL community, as agents of change, to better support these renewed, holistic values of tertiary institutions, starting with repositioning themselves in a light of a T-shaped model.

SOTL AND THE T-SHAPED GRADUATE

Synchronous with Boyer's (1990) seminal work, which broadened the definition of scholarship beyond that of research and discovery to include the scholarships of integration, application, and teaching, Guest (1991) coined the term, a "T-shaped person." This term has been used repeatedly in the literature to describe the culmination of academic and non-academic skills in individuals from diverse backgrounds. Since Guest's initial concept was published, there have been many variations of the T-shaped person, including the T-shaped student and the T-shaped graduate. However, what is evident amongst all explanations is the model represented with a vertical stroke denoting discipline knowledge, and a horizontal bar symbolizing cross-domain non-academic skills and attitudes (see figure 2). For instance, T-shaped individuals are well-grounded in theory and practice in their area of study, and they have engaged in reading, completed assignments, practiced their trade, and learned what they need to know about the 'how to' of their field (the vertical stroke). The horizontal bar represents a set of skills that are nuanced by specific expectations yet are non-academic and more personal and social in nature. For the purpose of this paper, we will coin this term 'non-academic life skills.' These include an appreciation for life-skill learning, soft skills such as problem solving, communication, and responsibility (Schulz 2008), transferable skills (that is, those adaptable to more than one context) (Kemp and Seagraves 1995), and generic skills (general, core skills common to most contexts) (Kemp and Seagraves 1995). Vailes (2017) describes these skills as "flourishing," that is, enabling students to recognize their reach and potential. Oliver and Jorre (2019) observe that these skills have more "to do with global citizenship, teamwork and communication, critical thinking and problem solving" (6).

Figure 2. The T-shaped student (Mathers 2015, reproduced with permission)



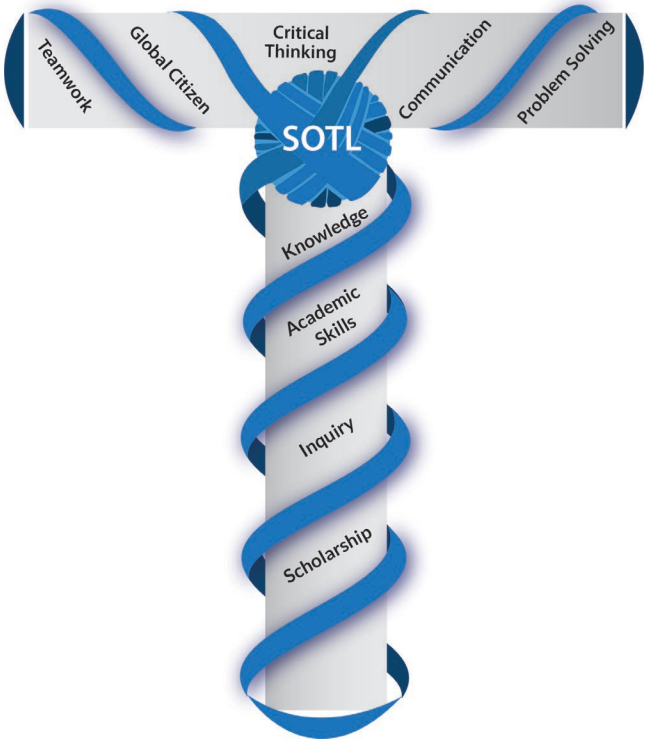
Regardless of the specific skills, there appears to be consensus in the literature that the T-shaped skills can be learned and developed at the undergraduate level as part of identity development, and that these competencies are critical for preparing graduates for the ever-changing demands of society and the workforce (Conley, Foley, Forman, Denham, and Coleman 2017; Saviano, Polese, Caputo, and Walletzký 2017). For the most part, the responsibility for this development is now being taken up by tertiary institutions (Baik, Larcombe, and Brooker 2019; Cook 2016; Trolian, Archibald, and Jach 2020) and therefore relies on the insitutions' academics and professional staff.

SoTL and the T-shaped practitioner

Conley, Foley, Forman, Denham, and Coleman (2017) emphasize that there must be an open attitude for learning and a stimulating learning environment for a T-shaped curriculum to be developed and a student encouraged to become a T-shaped graduate. This drives tertiary education institutions to be places where students excel academically and non-academically and can communicate, collaborate, problem-solve, and think creatively and critically. Achieving this will require a "change in the kind of knowledge on which education programs should be based" (Saviano, Polese, Caputo, and Walletzký 2017, 9) and the approaches to teaching—and interacting with—students.

We argue that as institutions recognize the need for developing T-shaped graduates, SoTL plays an increasingly pivotal role in the formation of those graduates, through academic staff members' own orientation toward and development of T-shaped skills, which allow them to, in turn, scaffold and foster their students' T-shaped development (Baik, Larcome, Brooker, Wyn, Allen, Brett, Field, and James 2017; Bell, Giusta, and Fernandez 2015; UOW 2019). An engagement between faculty and students establishes a relationship in which the contribution of each protagonist in the learning process is valued; this could be interpreted as *seeing learners as whole beings*. SoTL can act as the fulcrum of the 'T,' the epicentre where non-academic life skills and the disciplines in HE converge, at the heart of the matter. Our model (figure 3) illustrates schematically the duality and competing demands that students face within and outside of the learning and learnt environments. SoTL, we argue, is depicted as a fulcrum, with the multiple threads of discourse intricately entwined between the critical components of discipline mastery and non-academic life skills. If positioned correctly, with SoTL in equal parts on the 'T,' it can be used to better understand the personal journeys students travel in developing non-academic life skills while applying themselves academically. Our T-shaped model suggests that instead of SoTL being conceptualized as being distinct from HE research (see figure 1), it is seen as an integral part of developing the T-shaped student (see figure 2).

Figure 3. Our proposed repositioning of SoTL with the T-Shaped Model



TOWARD A T-SHAPED COMMUNITY

Up to this point, HE has focused on the learners' disciplinary experiences, the content, the acquisition of knowledge, and mastery (Meeuwse and Mason 2017). If we make developing a T-shaped graduate and fostering T-shaped practitioners to take pride in this work the focus of our work in HE,

then where we situate SoTL changes. With this new position of SoTL, we expand our vision, as suggested by others to equally prioritize the human side of learning (Hogan, Chamorro-Premuzic, and Kaiser 2013; Norman 2018; Tang 2019): the person, their prior and cultural experiences, the social skills needed to be employable, soft skills and attitudes, and understanding the learner as a growing and developing person.

In positioning SoTL as this fulcrum and fluid threads of discourse, we create a differing identity for the value, reach, and impact of SoTL research and practice within and beyond institutional contexts. Historically, for example, wellness centers and counselling services on university campuses have supported the wellbeing of university students, building non-academic life skills for students on a self-nominated basis. We see a role for T-shaped university staff to take action and leadership in advocating for a T-shaped approach to teaching, resulting in cultivation of these skills through SoTL and their integration into teaching and research. Learning spaces thus become venues for their refinement and application. We see SoTL as a means for HE institutions to escape traditional didactic pedagogical practices of filling students' minds with academic knowledge, and to fully realize their vision of developing T-shaped graduates who are ready for an unknown future and who will have the skills to continue to create and strengthen T-shaped communities. In a practical, enacted sense, SoTL provides educators with opportunities to improve their practices, benefit students, and generate evidence and evaluation of practices that are effective in fostering learning – something that is closely aligned with the desires of many contemporary educators. The foundational principles and characteristics that underpin SoTL as a discipline—its person-centred, holistic, and contextualized nature—are the reason why we believe the SoTL community is ready and equipped for this work.

As we argue in this paper, SoTL is represented by a fulcrum that is situated equally between academic and non-academic skills with fluid threads of discourse interweaving the T-shaped model. SoTL seeks to understand student learning, with a broad understanding of both 'student' and 'learning' (Chick, Nowell, and Lenart 2019; Felten 2013). 'Student', for instance, could refer to undergraduate students in a particular cohort, post-graduate researchers, or the faculty members themselves. Students need to be subjects and partners in their learning, as the SoTL literature about student partnerships attests (Healey, Flint, and Harrington 2014). Faculty members must also be subjects and partners in their own learning, and engaging in SoTL research projects can provide an avenue for this (Mercer-Mapstone and Kuchel 2016). SoTL as the fulcrum that allows for the lifelong T-shaped learner to flourish must apply to both students and faculty members. In this way, we become a T-shaped community, with all members of the HE community involved in emulating and working toward both subject mastery in the vertical stroke of the T and the transferable skills of the horizontal bar. Intentionally and authentically expanding the student-centered focus of SoTL poses a unique opportunity, and essential step, in building a T-shaped community.

Student-focused

At the heart of SoTL is a focus on students: student learning, student engagement, students as partners (Felten 2013). As Kreber (2013) writes, "engaging in the Scholarship of Teaching and Learning authentically means to be motivated by a duty and commitment to serve the important interests of students" (p. 7). By engaging in research that is "rooted in particular classroom, disciplinary, institutional and cultural contexts" (Felten 2013, 122–23), SoTL enables faculty to "make recommendations in response to their specific situation that are attuned to the needs of those in that

environment" (Blair 2013, 128–29). The inherent student-centered learning of SoTL work "allows for a more individualized and authentic understanding of individuals" (Blair 2013, 128) and is necessarily highly contextual and concerned with the situations and learners with whom the SoTL researchers are interacting (Blair 2013; Felten 2013). This learner-centered approach is a key strength of SoTL, and central to creating T-shaped learners and building a T-shaped community.

Not only is SoTL work fundamentally concerned with understanding learners and their learning, but it is also committed to working with students to conduct these inquiries. One of Felten's (2013) five principles of good practice in SoTL is that the work is "conducted in partnership with students" (123). Increasingly, students are partnering with faculty members to lead research, guide policy, and enhance teaching and learning experiences (Fanghanel, Pritchard, Potter, and Wisker 2016). As Mercer-Mapstone and Matthews (2017) discuss, students and faculty members are thereby positioned "as co-teachers, co-inquirers, curriculum co-creators, and co-learners across all facets of the educational enterprise" (p. 2). Research indicates that embedding students as partners will lead to increased motivation, self-awareness, and leadership in the learning process for both students and faculty members (Cook-Sather and Abbot 2016; Mercer-Mapstone and Matthews 2017). Importantly, student engagement with this process will promote a greater understanding of the dynamics of learning journeys in and through the corridors of HE (Healey, Flint, and Harrington 2014; Mercer-Mapstone and Kuchel 2016).

Students as partners

The SoTL practice of engaging students as partners in their own learning can have profound impacts on the T-shaped community, and aligns with the goals of modern universities to develop students who are proactive problem-solvers (Cook-Sather and Abbot 2016; Fanghanel et al. 2016). For example, engaging in SoTL with students as partners can promote student engagement and inclusion within HE settings and increase students' agency in and ownership of their own learning experiences (Cook-Sather and Abbot 2016; Fanghanel, Pritchard, Potter, and Wisker 2016). Cook-Sather and Abbot (2016) describe the transformative capacity of working with students as partners in teaching and learning collaborations.

Through the Students as Learners and Teachers (SaLT) program, undergraduate students were employed as consultants to faculty members, observing and providing feedback on their teaching practices. Cook-Sather and Abbot, who themselves participated in the SaLT program as a faculty member and student consultant, respectively, found that the program led students and faculty members to be "more informed… more confident, and more capable of risking and undertaking a wider range of forms of communication and practice" (7). They report that the students involved felt empowered and had an increased sense of ownership of their own learning, while the faculty members became overtly aware of the impact of their pedagogy and teaching practices.

By involving students in SoTL in significant ways, a student-centered approach can be implemented even more authentically and holistically. Furthermore, via a more holistic, inclusive, and intertwined T-shaped SoTL that includes faculty members as learners, everyone can be an active participant in co-creating a more intentionally T-shaped community. 'Learning' encompasses "not only disciplinary knowledge or skill development, but also the cultivation of attitudes or habits that connect to learning" (Felten 2013, 122), including the transferable skills that HE institutions are seeking to develop in their graduates (Fanghanel, Pritchard, Potter, and Wisker 2016; Mercer-Mapstone and

Kuchel 2016). Institutions need to make the most of faculty learning and SoTL as an important path toward T-shaped educators. Currently, our SoTL studies often treat learning as an identifiable, concrete, discrete subject that happens in particular time frames, locations, and spaces; nevertheless, learning does not happen in a vacuum, and constructivist learning theories assert that knowledge is a shared creation (Swan 2005). According to Hutchings, Borin, Keesing-Styles, Martin, Michael, Scharff, Simkins, and Ismail (2013), one of the key principles of SoTL is that "it begins with faculty members' questions about their own students' learning, whether that be in their own classes or in a larger program of study" (38). In so doing, SoTL "promotes a research approach to practice" (Fanghanel, Pritchard, Potter, and Wisker 2016, 6) that can have far-reaching impacts on an educator's pedagogy and practices, and by consequence faculty and student learning and development.

Shaping non-academic life skills

The context-driven nature of SoTL research allows academics to "tell the story of their particular situation" (Blair 2013, 127) while integrating the findings of many scholars to "see the things that are common to many areas of practice" (Blair 2013, 127). For instance, Mercer-Mapstone and Kuchel's (2016) tutorial activities "scaffold the explicit teaching and learning of science communication" (2) skills into an existing science program. By making their SoTL research public, and providing all resources upon request, not only have Mercer-Mapstone and Kuchel helped their own students to develop communication skills, but their publication also enables other educators to learn from their experiences and implement similar approaches with their own student cohorts. Thus, engaging in SoTL research can enable faculty to identify an ongoing and intentional integration of non-academic life skills while also teaching their discipline content.

Professional development

SoTL could, potentially, be a unique faculty-development tool that looks at learning occurring in and out of the classroom, as well as helps faculty develop their own collaborative, cooperative, inclusive, and intercultural skills. For instance, research has shown that faculty members affect students' learning, via particular pedagogies, but it is often assumed, or at least not openly discussed, that as researchers, we cannot be impartial observers of learning (Chick 2013). The field of anthropology has addressed the issue of the assumed or implied unbiased-observer role by developing self-awareness that includes an analysis of the positionality of the researcher (Jackson 2006). SoTL too, would benefit from a more inclusive, expansive, and self-aware writing style (see Behari-Leak 2020; Chng and Mårtensson 2020; Felten, Bagg, Bumbry, Hill, Hornsby, Pratt, and Weller 2013) to produce a deep, broad, and meaningful understanding of the complex learning processes we seek to uncover. To do so, the social science model of "acceptable" (and therefore publishable) SoTL research studies with discrete, rote sections (methods, results, discussion, etc.) must be expanded and, more varied methods, analysis, and even writing styles must be actively invited, as Chick (2013) and others suggest.

Collaborative opportunities

Communities grounded in strong and inclusive collaborative relationships (Smale and Hilbrecht 2016) are vital in SoTL, and the T-shaped community can and should amplify such relationships. As Poole (2013) argues, they enable SoTL researchers to collaborate with scholars outside of their own

fields of expertise in pursuit of a common question regarding teaching and learning, with a "useful sharing of responsibility for research outcomes" (p. 140). Robinson, Gresalfi, Sievert, Kearns, Christensen, and Zolan (2013) discuss the value of multidisciplinarity in SoTL in the context of a graduate student seminar on teaching and learning that brought together students and faculty from four disciplines. Important critiques have been made, including that humanities scholars have had to abandon their disciplinary identities and instead take up social-science approaches to be accepted within the SoTL field (Chick 2013; Potter and Wuetherick 2015). Although, there is a growing recognition of the importance of collaborative research, the notion lingers that systems in place in HE reward the single-authored, solo, cult to individual intellect, particularly in promotion decisions (Finkelstein and Jones 2019). Notwithstanding, individuals can embrace their disciplinary perspectives while also engaging in interdisciplinary projects and cross the present artificial borders and boundaries. For far too long academic work has been confined to disciplinary silos; in contrast, T-shaped practitioners entertain a lifelong, holistic curiosity about how to improve their teaching, research, and practice. The SoTL community has been "founded, and is still largely perceived as, an interdisciplinary and inclusive field of scholarship" (Potter and Wuetherick 2015, 13), and a more T-shaped notion of SoTL can ensure that interdisciplinarity and inclusivity flourish within HE.

Developing the whole student

SoTL, in the era of borderless learning, needs to move beyond the classroom environment and engage others who are also working on developing the whole student. This necessitates a systemic cultural change that intentionally positions classroom learning in an entirely different context, such as that of student life organizations, to create authentic learning experiences. This movement toward a T-shaped community brings the staff who have expertise in transferable skills into the scholarship fold.

Importantly, SoTL can be a reminder of the inherent worthiness of teaching and learning. Educators are constantly tasked to do more with less (resources, time, etc.), burnout and over-commitment are common, and apathy or "I'm too busy" are used as self-defence mechanisms (Finkelstein and Jones 2019). In a profession constantly in flux, demanding frenetic adaptation at a pace to increasing new demands, the T-shaped community that is anchored in and employs SoTL practices has the possibility of offering different solutions. We can reclaim meaning and purpose in what we do, and demonstrate that what we do matters, to both our own and our students' learning. Even as interdisiplinarity continues to present challenges, the SoTL community frequently builds bridges and crosses disciplinary boundaries (Hutchings, Borin, Keesing-Styles, Martin, Michael, Scharff, Simkins, and Ismail 2013; Poole 2013). This approach will be crucial in the complex development of a T-shaped community where the whole student, as well as the whole educator, can develop the depth and breadth of their understanding *and* skillsets.

Opportunities in a T-shaped community

Returning to the cultural, structural, technological, and ideological changes in HE (David and Naidoo 2018; Zaida and Rust 2016), two areas that provide particular opportunities for SoTL in developing a T-shaped community are technology and the ideological movement in accountability. HE has been immersed in both, but the Coronavirus (COVID-19) pandemic of 2020 brought both technology and accountability more to the forefront as institutions quickly moved online, and then

transitioned from emergency remote teaching toward more effective online practices (*Chronicle of Higher Education* 2020).

Technology

To accommodate the needs of a T-shaped student, HE must adapt to the reality of diverse demographics and an internationalized economy, which is indeed a challenge (Støren and Aamodt 2010). HE understands that graduates will be more globally connected than ever (Cantini 2016; Westover 2017). A recent report from the United Kingdom (Allen, Seaman, Roulin, and Staut 2016) reiterated the international trend in HE, as well as increased use of technology, the evolving professoriate, and the changing undergraduate population and curriculum.

As the UK report attests, one of the greatest areas of change in HE in the past three decades has been the use of technology. According to Muller, Gradel, Deane, Forte, McCabe, Pickett, Piokowski, Scalzo, and Sullivan (2019), the number of students registered in online degree programs has been growing steadily, and institutions have been increasing their online course and program offerings. In the northern autumn of 2016, 31.6% of all students at US institutions completed at least one online course, and over 3 million completed all of their courses online (Allen, Seaman, Roulin, and Staut 2016). In a 2015 survey, 77% of chief academic officers at institutions with online offerings agreed that online learning is "a critical component of their long-term strategy" (Allen, Seaman, Roulin, and Staut 2016, 5). In a similar survey of chief academic officers from 2017, 83% of the respondents indicated that they plan to expand online offerings within the next year (Jaschik and Lederman 2018). While online learning is not new, in recent years, it has moved in from the periphery of HE to become a central component of institutional strategies for increasing student enrolment, retention, reach, and completion. In times of crisis, remote learning can become *the* only means by which teaching and learning survive and continue (Coughlan and Goff 2019).

Joos and Meijdam (2019) suggest that the top 13 technology trends affecting HE overlap in three domains: enrichment of teaching and learning, incorporation of flexibility in education, and adaptive learning. Whilst technology in HE has been growing, so has the need to educate students for employment in a technology-rich environment. Aoun (2017), for example, proposes an educational framework that prepares graduates to fill the needs of society that even the most sophisticated computer cannot; that is, to make students "robot-proof." He identifies artificial intelligence as the single most important threat to the white-collar jobs most of our graduates take up. If universities do not embrace lifelong learning and flexibility of thought, if they do not strive to develop those human traits of resilience and cooperation that will always give humans the advantage, then they will have failed in their obligation.

Since Boyer (1990) asked the academy to consider interdisciplinary work, the application of knowledge in authentic contexts, and teaching itself as constituting scholarship, much has changed in the traditional ways learners are taught and what is considered valuable. The importance of authentic contexts is echoed in works by Lane (2015) and Kuh (2008), who argue that HE needs to band together with other stakeholders, including the surrounding social communities, to address concerns that affect peoples' lives. Change, Lane (2015) argues, needs to be collective and adaptive. We concur with Lane, and suggest that SoTL could be the vehicle for this inexorable integration of technology with teaching and learning (see Hubball, Pearson, and Clarke 2013; Cochrane and Narayan 2018).

Accountable teaching and learning practices

The concept of T-shaped academics building a T-shaped community aligns with the rising interest in accountability in the HE sector. Addressing this issue of accountability could potentially rescue the public's erosion of the value of HE. As Hutchings, Borin, Keesing-Styles, Martin, Michael, Scharff, Simkins, and Ismail (2013) suggest, SoTL and accountability measures can be complementary:

> *SoTL can contribute to what is, or should be, the central goal of accountability: ensuring and improving the quality of student learning. The accountability movement, for its part, can provide a new context for integrating and valuing SoTL as a force for positive change on campuses and beyond (36).*

Trigwell's (2013) study found that there is a valid connection between SoTL practices and student learning: "The teachers who adopt scholarly, inquiring, reflecting, peer-reviewing, student-centred approaches to teaching are likely to be achieving the purpose of improving student learning" (p. 102). This repositioning of SoTL collectively and collaboratively can support progress toward creating T-shaped communities.

CONCLUSION

Traditionally, SoTL has examined the learned experiences of students and faculties; therefore, our theoretical framework proposes an expanded notion of T-shaped learner practitioners and a community in which SoTL forms the unifying fluid multiple threads of discourse. We acknowledge that this paper has presented the conceptualization of the framework, and we invite readers to process this discussion and think of what a T-shaped model means for their own process, practice, and implementation. For example, faculty members who teach and analyze reflection skills could reach out to and work with residence-life staff or campus counsellors who lead discussions about identity, inclusivity, etc. that require students to tap into self-awareness and engage in deep, critical reflection. Editors may author an introductory preface section of published papers that describes and analyzes the positionality of the researcher. This work could suggest that academics can function not only to expand their field or discipline, but also to invent or develop tools that allow faculty members to actively apply the skills to be a T-shaped practitioner. In future scholarly publications we will continue the evolution of the framework and present practicalities of integrating the T-shaped SoTL framework into HE.

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Appendix 5: Ethical Application Approval Letters

This section will include, where appropriate, the ethics confirmation letters for the submitted publications. Only three publications required ethical approval (publications, two, four and five)

EXTERNAL AND STRATEGIC DEVELOPMENT SERVICES
uel.ac.uk/qa
Quality Assurance and Enhancement

23 January 2014

Dear Earle

Project Title:	**Troublesome Knowing: Academic Identity and SoTL**
Researcher(s):	**Earle Abrahamson**
Principal Investigator:	**Dr Karen Manarin**

I am writing to confirm that the application for the aforementioned proposed research study received ethical approval from the University Research Ethics Committee (UREC) on **Thursday 23 January 2014.**

Should any significant adverse events or considerable changes occur in connection with this research project that may consequently alter relevant ethical considerations, this must be reported immediately to UREC. Subsequent to such changes an Ethical Amendment Form should be completed and submitted to UREC.

Approved Research Site

I am pleased to confirm that the approval of the proposed research applies to the following research site.

Research Site	**Principal Investigator / Local Collaborator**
Interviews will take place using Skype, email and telephone.	Dr Karen Manarin

Approved Documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	***Version***	***Date***
UREC Application Form	2.0	22 January 2014
Participant Information Sheet	1.0	18 December 2013
Consent Form	1.0	18 December 2013
Human Research Ethics Board ethical approval letter from Mount Royal University	1.0	18 December 2013
Survey on SoTL	1.0	18 December 2013

Docklands Campus, University Way, London E16 2RD
Tel: +44 (0)20 8223 3322 Fax: +44 (0)20 8223 3394 MINICOM 020 8223 2853
Email: r.carter@uel.ac.uk

Approval is given on the understanding that the UEL Code of Good Practice in Research is adhered to.

With the Committee's best wishes for the success of this project.

Yours sincerely,

Catherine Fieulleteau
Ethics Integrity Manager
University Research Ethics Committee (UREC)
Email: **researchethics@uel.ac.uk**

EXTERNAL AND STRATEGIC DEVELOPMENT SERVICES
uel.ac.uk/qa
Quality Assurance and Enhancement

16 August 2016

Dear Earle,

Project Title:	**Is Turnitin a useful tool for enhancing academic writing? An investigation into staff and students' perspectives, stories and approaches**
Principal Investigator:	**Earle Abrahamson**
Researcher:	**Jonathan Mann**
Reference Number:	**UREC 1516 136**

I am writing to confirm the outcome of your application to the University Research Ethics Committee (UREC), which was considered by UREC **on Wednesday 20 July 2016.**

The decision made by members of the Committee is **Approved**. The Committee's response is based on the protocol described in the application form and supporting documentation. Your study has received ethical approval from the date of this letter.

Should you wish to make any changes in connection with your research project, this must be reported immediately to UREC. A Notification of Amendment form should be submitted for approval, accompanied by any additional or amended documents: http://www.uel.ac.uk/wwwmedia/schools/graduate/documents/Notification-of-Amendment-to-Approved-Ethics-App-150115.doc

Any adverse events that occur in connection with this research project must be reported immediately to UREC.

Approved Research Site

I am pleased to confirm that the approval of the proposed research applies to the following research site.

Research Site	Principal Investigator / Local Collaborator
University of East London	Earle Abrahamson

Docklands Campus, University Way, London E16 2RD
Tel: +44 (0)20 8223 3322 Fax: +44 (0)20 8223 3394 MINICOM 020 8223 2853
Email: r.carter@uel.ac.uk

Approved Documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	***Version***	***Date***
UREC application form	2.0	12 August 2016
Participant Information Sheet	2.0	12 August 2016
Consent Form	1.0	8 June 2016
Student focus group questions	1.0	8 June 2016
Staff focus group questions	1.0	8 June 2016

Approval is given on the understanding that the UEL Code of Practice in Research is adhered to.

The University will periodically audit a random sample of applications for ethical approval, to ensure that the research study is conducted in compliance with the consent given by the ethics Committee and to the highest standards of rigour and integrity.

Please note, it is your responsibility to retain this letter for your records.

With the Committee's best wishes for the success of this project.

Yours sincerely,

Catherine Fieulleteau
Research Integrity and Ethics Manager
University Research Ethics Committee (UREC)
Email: **researchethics@uel.ac.uk**

EXTERNAL AND STRATEGIC DEVELOPMENT SERVICES
uel.ac.uk/qa
Quality Assurance and Enhancement

16 August 2016

Dear Claire,

Project Title:	**The impact and value of a student-led peer mentoring scheme in the University of East London (UEL) undergraduate Podiatry and Sports Therapy degree programmes**
Principal Investigator:	**Claire Duguid**
Researcher:	**Earle Abrahamson**
Reference Number:	**UREC 1516 152**

I am writing to confirm the outcome of your application to the University Research Ethics Committee (UREC), which was considered by UREC **on Wednesday 20 July 2016.**

The decision made by members of the Committee is **Approved**. The Committee's response is based on the protocol described in the application form and supporting documentation. Your study has received ethical approval from the date of this letter.

Should you wish to make any changes in connection with your research project, this must be reported immediately to UREC. A Notification of Amendment form should be submitted for approval, accompanied by any additional or amended documents: http://www.uel.ac.uk/wwwmedia/schools/graduate/documents/Notification-of-Amendment-to-Approved-Ethics-App-150115.doc

Any adverse events that occur in connection with this research project must be reported immediately to UREC.

Approved Research Site

I am pleased to confirm that the approval of the proposed research applies to the following research site.

Research Site	Principal Investigator / Local Collaborator
University of East London	Claire Duguid

Docklands Campus, University Way, London E16 2RD
Tel: +44 (0)20 8223 3322 Fax: +44 (0)20 8223 3394 MINICOM 020 8223 2853
Email: r.carter@uel.ac.uk

Approved Documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	***Version***	***Date***
UREC application form	2.0	10 August 2016
Participant Information Sheet – Peer mentor	2.0	10 August 2016
Consent Form – Peer mentor	2.0	10 August 2016
Participant Information Sheet – Peer mentee	2.0	10 August 2016
Consent Form – Peer mentee	2.0	10 August 2016
Interview questions - mentor	2.0	16 August 2016
Interview questions - mentee	2.0	16 August 2016

Approval is given on the understanding that the UEL Code of Practice in Research is adhered to.

The University will periodically audit a random sample of applications for ethical approval, to ensure that the research study is conducted in compliance with the consent given by the ethics Committee and to the highest standards of rigour and integrity.

Please note, it is your responsibility to retain this letter for your records.

With the Committee's best wishes for the success of this project.

Yours sincerely,

Catherine Fieulleteau
Research Integrity and Ethics Manager
University Research Ethics Committee (UREC)
Email: **researchethics@uel.ac.uk**