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Using Legitimation Code Theory to Define and Track the Practice of the Scholarship of Teaching and Learning

Mark Brooke, Daron Benjamin Loo, and Chloe Wong National University of Singapore

In this article, we demonstrate how Legitimation Code Theory (LCT) can be enacted to explore the nature of Scholarship of Teaching and Learning (SoTL) in higher education. Specialization and semantics from LCT are applied to define SoTL practice and map cumulative knowledge building processes. As members of the Faculty Development Committee (FDC), we enact LCT tools to conceptualize our professional development. We provide SoTL narratives as well as vignettes depicting how LCT led to positive transformative learning. The article concludes that LCT tools, with their explanatory power, can be utilized to form highly effective components of a faculty development program.

Today, the scholarship of teaching and learning (SoTL) has greatly increased in importance for academics with the development of the educator track in higher education now offering progression to full professor appointment (Gan & Geertsema, 2018). Moreover, most, if not all, tertiary institutes have at least one specially formed teaching development centre which offers unique training programmes to their staff. It has been defined as 'a broad set of practices that engage teachers in looking closely and critically at student learning for the purpose of improving their own courses and programmes' (Hutchings et al, 2011, p. 7). It is said to be important as it helps to bridge the divides between theories of teaching and learning, classroom research, and classroom teaching practice and thus closely links academic staff's research activities to the student learning experience (Kern et al., 2015; Locke, 2016). Scholarship of teaching and learning is often linked to Boyer's (1990) conceptualisation of scholarship. Boyer (1990) argues that scholarship is not an esoteric phenomenon but something that can be defined. To do this, he presents the scholarship of teaching as grounded in knowledge, and systematically planned (as cited in Zou & Geertsema, 2020).

As Elmore (2008) points out, professional practice is constructed around shared knowledge, skills, and ways of thinking. Thus, helping to build a system centred on a shared language for knowledge transfer across faculties and institutions could be extremely useful (Mårtensson & Roxå, 2021). It could help to shift away from possible segmented learning to a more cumulative knowledgebuilding system (Maton, 2013a). As a Faculty Development Committee (FDC) in a high-ranking university in southeast Asia, we have designed a system to conceptualise a SoTL practitioner's practice effectively and to map it cumulatively. It draws on Lowenberg-Ball et al.'s (2008) extension of Shulman's (1987) teacher knowledge types as well as two tools from Legitimation Code Theory, specialization and semantics. In LCT terms, specialization and semantics

are tools that can be enacted as 'translation devices' (Maton & Chen, 2016).

The first author and lead of the FDC is an experienced user of LCT tools and has published multiple research articles in this field. Visuals and narratives enacting specialization and semantics to present his SoTL persona and cumulative knowledge development over time are provided and the tools evaluated for their effectiveness. The two other authors, also FDC members, and newcomers to LCT, also applied specialization and semantics to conceptualise their SoTL practice and development over time. We provide vignettes from them discussing their experiences of using these tools for the first time. The findings demonstrate that combining Lowenberg-Ball et al.'s (2008) extension of Shulman's (1987) teacher knowledge types with specialization and semantics provides a great deal of explanatory power. We hope that this study might encourage staff working in faculty development to also consider this framework in their programmes.

Conceptual Framework

The Model for Academic Development through SoTL is the conceptual framework developed to derive and then analyze the data. It draws on specialization from Legitimation Code Theory to categorise Lowenberg-Ball et al.'s (2008) extension of Shulman's work on pedagogical content knowledge and content knowledge as knowledge codes. Specialization codes can also be enacted for knower codes or types of SoTL practitioner roles. In sum, the knowledge and knower codes can be enacted as organizing principles of SoTL practice. Semantic gravity can be enacted to track how the organizing principles of SoTL practice are employed in similar or different pedagogical contexts over time. It enacts the classification of knowledge structures according to levels of context dependency, and specifically, if these are more theoretical/abstract or empirical/concrete in nature. There is a bi-directional arrow to explain the relationship between specialization and semantic gravity because as practitioners repeat experimental research, explore different fields in the same context, or compare the same field in different contexts, the process represents cumulative knowledge building practices. These concepts are further presented in Figure 1.

Lowenberg-Ball et al. (2008) have extended the knowledge structures from Shulman's (1987) seminal work on teacher knowledge types. Despite their focus on maths education, their ideas can apply equally well for other SoTL fields. The most influential construct from Shulman's (1987) list is pedagogical content knowledge defined as:

The most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations—in a word, the most useful ways of representing and formulating the subject that make it comprehensible to others.... Pedagogical content knowledge also includes an understanding of what makes the learning of specific topics easy or difficult: the conceptions and preconceptions that students of different ages and backgrounds bring with them to the learning of those most frequently taught topics and lessons. (p. 9)

However, Lowenberg-Ball et al. (2008) argue that pedagogical content knowledge could be further divided into knowledge of content and students as well as knowledge of content and teaching (p. 399). Additionally, they subdivide Shulman's content knowledge into common content knowledge and specialized content knowledge (p. 399). They then go on to define these extensions of Shulman's (1987) theory. Special content knowledge (SCK) is 'knowledge and skill not typically needed for purposes other than teaching' (p. 400). It is the individual, unique knowledge that teachers possess in terms of the way that they use language, gesture, and visualization to facilitate student learning. It might be termed the teacher-in-person discourse for learning. Common content knowledge (CCK) is defined as 'knowledge and skill used in settings other than teaching' (p. 399). It relates to the commonly shared every-teacher discourse in a field. For example, in textbooks and the content of reference books. Knowledge of content and students (KCS) is familiarity with students as learners, for example, research in student anxiety and motivation. Knowledge of content and teaching (KCT) combines knowing about teaching and subject matter, for example, a teacher is required to know about how to produce effective materials and to set up sound instructional design systems (e.g., problembased pedagogy) to use the materials.

In Table 1 we provide some examples of knowledge practices that teachers involved in SoTL might explore in their research using Lowenberg-Ball et al.'s (2008) taxonomy. Many other notions can fit into this categorization demonstrating the explanatory power of pedagogical content knowledge and content knowledge.

In addition to the knowledge structures extended by Lowenberg-Ball et al. (2008), we define the SoTL practitioner-as-knower as an element in our framework. To do this, we incorporate the types of roles that scholarteachers have explored. This is often ignored in professional development programmes. For example, a role like the 'empathizer' helps to affirm students' work and is an important catalyst for greater student participation (Rocca, 2010). These roles can be explored to complement knowledge structures presented in Table 1. In Table 2, just a few of the SoTL roles that we have identified in the literature. Based on inductive analyses, we have divided them as two categories: working with students and working with material.

In the next section, we demonstrate how knowledge and knower constructs, as exemplified in Tables 1 and 2, can be enacted using the specialization and semantics dimensions from Legitimation Code Theory.

Legitimation Code Theory

Legitimation Code Theory is a framework for analysing socio-cultural practices and, in particular, the organizing principles of practice. In fields such as education, certain principles that lead to achievement may only be tacitly known (Clarence, 2016). Legitimation Code Theory seeks to make these visible so they may be taught and learned. To accomplish this, researchers using Legitimation Code Theory develop 'translation devices' (Maton & Chen, 2016) to analyze empirical data. According to Pountney and McPhail (2017, p. 1069), translation devices are essential mechanisms as they help to make accessible the analysis of the organising principles in play in a given context. Moreover, as Maton and Chen (2016) state, the device is key to making explicit relations between concepts and data (p. 50). Lowenberg-Ball et al.'s (2008) extension of Shulman's PCK and CK can be enacted as organizing principles of SoTL practice.

Specialization

Specialization refers to the reality that all human practices and beliefs are about, or positioned toward, something; and thus involving relations to objects of focus, and are by someone, thereby concerned with relations to subjects. There are practices that emphasise epistemic relations (ER+) and downplay actors'

Figure 1

Model for Academic Development Through SoTL





Table 1

Examples of Knowledge Practices in SoTL Applying Lowenberg-Ball et al.'s (2008) Taxonomy

Pedagogical Content Knowledge (PCK)		Content Knowledge (CK)	
Specialized content knowledge (SCK): related to an individual teacher' discourse.	Common content knowledge (CCK)	Knowledge of content & students (KCS)	Knowledge of content & teaching (KCT)
Asynchronous written communication, synchronous written communication, verbal teacher talk & visual communication (e.g., gesture) in the classroom.	Textbooks, references, journal articles, online resources.	Affective domain (e.g., anxiety), motivation, learning styles (e.g., linguistic, visual), translanguaging (e.g., L1/L2/L3 transfer), sociocultural learning, (e.g., Interactional patterns), critical thinking dispositions	Curriculum design (e.g., task/problem /project-based learning, material development (e.g., linguistic, visual, auditory), formative assessment (e.g., peer review), digital pedagogy.

Table 2

Examples of Knower Practices in SoTL

SoTL Practitioner Knower Identities			
Working with Students	Working with Material		
Empathizer (Rocca, 2010)	Technologist (Abrahamson, 2010)		
Awareness raiser (Schmidt, 2001)	Constructor (Yu & Lee, 2016);		
Co-investigator (Felton, 2013)	Evaluator (Rocca, 2010)		
Ethicist (Healey et al., 2013)	Interdisciplinarian (McKinney, 2013)		
Researcher (Miller-Young & Yeo, 2015)	Analyst (Trigwell & Shale, 2004)		

dispositions (SR-) as the basis of achievement; these are represented by the knowledge codes (ER). There are also practices that emphasize social relations (SR+) and downplay epistemic relations (ER-); these are represented by the knower codes (SR). Orientations toward knowledge (ER+) or knower (SR+) are contextspecific and reflected in practices. As Portman and Rass (2019) point out, learning the natural sciences is generally viewed as a process of knowledge construction (ER+, SR-) and an individual's attributes are downplayed (SR+, ER-). In the elite quadrant of the cartesian plane (SR+, ER+), it is understood that both knowledge and knower codes are essential for success. Being an expert musician might be construed as an elite code as the individual is said to require long-term engagement with the discipline as well as the technical skills of instrumentation (Portman & Rass, 2019, p. 557). Finally, the relativist code (SR-, ER-) emphasises that neither specialised knowledge nor knower characteristics contribute to success in the field. For example, Maton and Chen (2019) found that Chinese students at an Australian university reported studentcentred pedagogy lacking both epistemic relations and legitimate social relations and was therefore viewed as a relativist code (ER-, SR-). For these students, the pedagogy was 'experienced as a vacuum' as there appeared no apparent 'rules of the game' as the basis for achievement (pp. 14-15).

For this article, the knowledge structures developed by Lowenberg-Ball et al (2008) related to pedagogical content knowledge and content knowledge are positioned in the ER+ region of the cartesian plane. The SoTL practitioner or knower roles that a professional can take on in educational contexts are positioned in the SR+ region of the plane. See Figure 2.

Semantic Gravity

Semantics is a dimension from Legitimation Code Theory that perceives social fields of practice as semantic structures whose organizing principles are conceptualized as semantic codes (Maton, 2013a). It is divided into semantic density and gravity. Semantic gravity is used in this study, and is defined by Maton (2013a) as:

The degree to which meaning relates to its context, whether that is social or symbolic. Semantic gravity may be relatively stronger (+) or weaker (-) along a continuum of strengths. The stronger the semantic gravity (SG+), the more closely meaning is related to its context; the weaker the gravity (SG-), the less dependent meaning is on its context. (p. 65)

All meanings can be seen to relate to context in some way; semantic gravity conceptualizes how much they depend on that context to make sense. Semantic gravity varies on a continuum of context dependency, moving from stronger to weaker dependence and back again. For example, a teacher applying the content from a textbook in a unique way for a specific classroom is restructuring that content to make it relatively more context-dependent (SG+). Analysts can record content as processes using semantic gravity profiling on a graph. There might be shifts between SG- and SG+ and back to SG- content creating semantic gravity waves as in profile B in Figure 3. In addition to waves, flatlines can be recorded as profiles with very limited range (refer to A1 and A2 in Figure 3). These appear when the meaning of a message remains either consistently abstract and context- independent (A1) or consistently concrete and context-dependent (SG+). Finally, up-and-down escalator patterns may be heuristically mapped. If abstract meanings are unpacked using definition or exemplification, but the critical reflection fails to connect these concepts to other related concepts effectively to produce a semantic gravity wave, a 'down escalator' is produced. Alternatively, a reflection might be mapped as an 'up escalator' if it comprises contextdependent classroom narratives at the start and then links these to abstract concepts and underlying principles of practice as one event only. If producing up or down escalators, novice SoTL reflectors are said to be revealing 'segmented learning' rather than 'cumulative learning' (Maton, 2013a) because they are not linking knowledge across time and contexts.

Cartesian Plane Enacting Specialization Codes

Figure 2



Note. From "Specialization codes: Knowledge, knowers and student success," by K. Maton and R. Chen, 2019, in J. R. Martin, K. Maton, & Y. J. Doran (Eds.), *Accessing academic discourse: Systemic functional linguistics and Legitimation Code Theory*. Copyright 2019 by Routledge.

Figure 3





Note. Adapted from "Making semantic waves: A key to cumulative knowledge-building," by K. Maton, 2013, *Linguistics and Education*, 24(1), p. 16. Copyright 2012 by Elsevier.

In this way, semantic gravity provides a strategy for mapping a SoTL practitioners' professional development by classifying knowledge structures according to levels of context dependency. For example, Clarence (2016) demonstrates how Political Science lecturers were able to use semantic gravity as a productive language to talk about how they intend to build conceptual knowledge over time through pedagogy and assessment.

Method

The authors are members of the Faculty Development Committee (FDC) of a top-ranking university in Asia. Each FDC member is an experienced higher education lecturer with at least 5 years' experience in English Linguistics and teaching language communication and a post-graduate qualification in a relevant field. The main author and lead for the FDC has been working with tools from Legitimation Code Theory for approximately 5 years. The two co-authors, fellow members of the Faculty Development Committee, are newcomers to the Legitimation Code Theory tools. These committee members were invited to read the SoTL narratives enacting specialization and semantics from the first author and to discuss their content. The two members then went on to apply the tools themselves for the first time to describe their own practices. These two FDC members then reported their views on the system used. These are presented as vignettes, defined as a brief evocative account. As Skilling and Stylianides (2020) point out, vignettes in educational research are effective for presenting 'teacher beliefs and understandings and how these influence teacher practices' (p. 541). It is hoped that these vignettes might impact fellow SoTL practitioners. Thus, the importance of catalytic authenticity (Given, 2008) in this research. The positive feedback from the two newcomers to LCT demonstrates that the framework is functional and could be applied by faculty developers in other contexts.

Results

The following are the Faculty Development Committee lead's enactments of the Legitimation Code Theory tools to describe his SoTL practices (Figures 4 and 5). These descriptions are simplified as it is not in the scope of this study to provide extensive account.

Narrative 1 Accompanying Figure 4

My SoTL research has recently focused on SCK, and teacher talk as discourse for presenting highly conceptual terms in the classroom in a comprehensible manner. In particular, I have focused on defining and exemplifying abstract terms and connecting them in meaning. Teacher input can be analysed as discourse using distinctions between content obligatory language and content complementary language, as developed by Fortune and Tedick (2008). Content obligatory language is the 'discipline key content concepts' (Fortune & Tedick, 2008); content complementary language, the academic language required to carry the content. Content and language integrated learning is commonly linked to disciplinarity. Moreover, the notion of being an 'awareness-raiser' is important in my recent SoTL practice and specifically Schmidt's (2001) work on the noticing hypothesis (NH). NH research can be linked to knowledge of content & students (KCS) using Lowenberg-Ball et al.'s

(2008) taxonomy. The concept is relevant to all disciplines. The idea is that students can only really learn when they are ready for uptake. This readiness to learn can be better facilitated if the teacher explicitly presents the new knowledge by connecting it to students' current knowledge to facilitate cumulative knowledge building. Therefore, being aware of students' current level of conceptual understanding in the field (Georgiou et al., 2014, p. 262) is very important. To do this, I have first used terms in my teacher talk such as not "following norms" or "interdependence" before introducing sociological terms like "deviance" or "organic solidarity." In this way, students notice the links between the technical terms and their more common-sense meanings.

Evaluation of Narrative 1

this description, SoTL research In has predominantly focused on SCK, and, in particular, teacher talk as discourse in the classroom. 'Discourse' in the cartesian plane is in the knowledge section (ER+) defined as the abstract knowledge constructs content obligatory language and content complementary language. The term 'discourse' is positioned in the ER+/SR- quadrant. However, 'teacher talk as discourse in this context' is much closer to SR+ on the plane as it does focus on social relations (SR+). That is, it is concerned with presenting knowledge in а comprehensible manner to communicate meaning to students in a given context. Thus, 'teacher talk' is in the ER+/SR+ quadrant but 'teacher talk' is less ER+ than 'discourse,' as it relates to the specific wording of a unique monologue in a classroom rather than the timeless theoretical every-text conceptualisation of the language in terms of content obligatory language and content complementary language. After that, the narrative then describes how the SoTL practitioner has been focusing on his role as 'awareness-raiser' using Schmidt's (2001) work on the noticing hypothesis (NH). 'Awareness-raiser' is positioned in the knower section (SR+) as it is used in this context to focus on relationships between teaching and student learning in a particular context. However, for the reference to Schmidt's (2001) work on the noticing hypothesis (NH), there is also a strong knowledge (ER+) orientation. focused on multiple contexts of research in this field. If discussed theoretically in this way, the noticing hypothesis (NH) could be positioned in the ER+ quadrant as it is done here in the SoTL practitioner data.

Narrative 2 Accompanying Figure 5

Studies 1, 2, and 3 in Figure 5 focus predominantly on how I have researched SCK in terms of teacher

Figure 4.

Enacting Specialization—SoTL Practice as Knowledge and Knower Codes



Note. Adapted from "Specialization codes: Knowledge, knowers and student success," by K. Maton and R. Chen, 2019, in J. R. Martin, K. Maton, & Y. J. Doran (Eds.), *Accessing academic discourse: Systemic functional linguistics and Legitimation Code Theory*. Copyright 2019 by Routledge.

Figure 5. SoTL Practice as Cumulative Knowledge Building



Note: Adapted from Maton, K. (2013). Making semantic waves: A key to cumulative knowledge-building. Linguistics and Education (24)1, 8-22 doi.org/10.1016/j.linged.2012.11.005.

talk in the classroom, and asynchronous written communication (AWC) in teacher corrective feedback. I have conducted discourse analyses of my teacher talk in terms of the interplay between content coligatory language (COL) and content complementary language (CCL) to better facilitate student comprehension of conceptual content. In Study 1, the COL was linked to my subject domain, the sociology of sport. In the second study, I researched COL in terms of how I explain language related to the genre pedagogical approach to my students, focusing on discourse semantics (field, mode, and tenor) and lexico-grammatical features of text types, particularly the introduction, methods, results, and discussion (IMRAD). In Study 3, as the research context shifted from teacher talk in the classroom to the students' own written research papers, not only are SCK and CCK important but so too is KCS; the content, and the students, and particularly their own writing abilities. In all three studies, I have employed ideas from Schmidt's (2001) noticing hypothesis and its links to student learning. I wanted to first tap into students' more common-sense meanings, and then to raise their awareness of the new field-specific technical meanings. By researching how to carefully stage input in this way, I help the new knowledge transition from input to intake and then to output. That is why there is a shift from teacher talk to student written texts across the timeline. In Study 3, my asynchronous written communication (AWC) as corrective feedback was also carefully managed to scaffold new terms, but I also noted to what extent these terms had been acquired by students in their own usage. Therefore, Study 3 was also exploring the findings from Studies 1 and 2.

Evaluation of Narrative 2

Enacting semantic gravity waving enables a description that tracks relationships over time between separate SoTL case studies. The knowledge (SCK and CCK) and knower structures (facilitator/awareness raiser) are presented in this visual as relatively SG- as these can apply to multiple contexts. In contrast, the actual specific educational research contexts (teacher talk and students' written texts) are from a particular discipline, time, and place, and with specific students. Therefore, these meanings are highly SG+. The SG- and SG+ meanings are then combined as knowledge structures across time to produce semantic gravity waves. Thus, the figure represents cumulative knowledge building. It tracks the SoTL practitioner's academic development in terms of knowledge (SCK, CCK and KCS), and as knower (facilitator/awareness raiser) revealing the contexts and their purposes of Studies 1, 2, and 3. A space remains for Study 4 for the practitioner to consider carefully how to retrospectively link back to the prior studies with a view to also building forward.

Faculty Development Committee Members' Reflections

In this section, the two Faculty Development Committee members' vignettes expressing their views of enacting specialization and semantics for the first time are provided.

Participant 1

Being involved in these activities allowed me to reflect on what I do in the classroom. This turned out to be a much-needed pause from focusing on preparing and delivering my lessons, to make apparent the epistemic values of the things I do in my classrooms. As shared by the lead, teaching effectively constitutes several knowledge bases, as well as the interaction between these bases for the purpose of creating a learning environment that is meaningful to the students. In my own classeswriting for academic purposes-I do find myself engaging with relevant literature that I believe will help me enhance my students' learning experience. A major knowledge base, which has been very helpful to me over the years, is that of written corrective feedback. Different studies that delve into the issue of effective feedback provision, set in different contexts, have provided me with practical approaches of how feedback can be situated in my classroom. How feedback is 'situated' in my classroom has been shaped by other knowledge bases, namely translanguaging (Kaufhold, 2018) and contrastive/intercultural rhetoric (Connor, 2002, 2004).

Prior to being involved in these activities, the interaction between these knowledge bases was premised on 'what works,' which is a rather superficial means for bridging knowledge together. When I think of this, I realise the epistemic deficit I might be accruing in my journey toward becoming a scholarly practitioner. Specifically, I was not deeply engaged in the pursuit of 'epistemic profits' or making any clear attempts at bringing these knowledge bases together, or of the knowers (Maton, 2013a, p. 62). Being involved in the activities offered a 'meta' language for which I can leverage to articulate links between areas of research with my class, and most importantly, in the interaction with my students. What this made me realise is that taking a practical approach to

scholarship, as a means to solve problems found in the classroom, is only good enough as an initial step. An important next step is for the accountable and scholarly practitioner to further this endeavour by examining the epistemic linkages found within the learning setting

Participant 2

These activities have helped in a review of my reflective practice and SoTL scholarship. My research interests lie in educational linguistics, and in more recent years, in individual studies into reducing learner anxiety (Ellis & Shintani, 2013), increasing learner motivation, growing learner engagement, and facilitating learner agency in the language classroom. Before learning about and applying the Legitimation Code Theory (LCT), I was a reactive reflective practitioner that identified issues in my practice or gaps in my knowledge and pursued 'segmented learning' (Maton, 2013a) by doing isolated research related to each unique incidence observed in the classroom.

LCT has provided me with a newfound appreciation of the significance of a cumulative knowledge building system-connective threads-that looks beyond the individual episodes in theory or practice and provides reflective practitioners with an effective conceptual framework that translates segmented reflections into cohesive knowledge practices. For example, shifting away from unidirectional studies based on individual classroom observations, the concept of semantic waves helps to connect context-dependent classroom narratives to abstract underlying principles in a continuous flow: Classroom experiences are iteratively reflected through theory and meaningfully reincorporated back in pedagogical practice-and repeat. Over time, this cumulative approach provides a transformative 'cumulative learning' (Maton, 2013a) SoTL experience that I find missing in my current scholarship. Going forward, LCT has inspired me to revisit and incorporate my past and present theoretical understanding and pedagogical experiences into my future studies to enrich the depth, relevance, and epistemological legitimacy of my reflective practice and scholarship.

Discussion

In both narratives, committee members refer to how the tools have enabled them to notice that, prior to these activities, they both had a segmented approach to SoTL premised on being a 'reactive reflective practitioner' and focusing on 'what works' in a particular classroom at a given time. Through the enactment of the LCT tools, they find that their 'knowledge bases' can be brought 'together' beyond this problem-solving state. They have observed how the tools can provide the clarification to develop their SoTL activities as 'connective threads.' As Participant 2 states, LCT 'translates segmented reflections into cohesive knowledge practices.' These connections help to build an 'epistemological legitimacy' as the activities are connected by a more overarching knowledge construct. Similarly, in Participant 1's terms, LCT helps to give his SoTL practice 'epistemic linkages.' Specialization as used in this way with Lowenberg et al.'s (2008) taxonomy has therefore been evaluated as an effective way to classify SoTL practice by both newcomers to the theory. LCT thus appears to have attended to a 'knowledge blindness' by helping these participants conceptualise the nature of the field of SoTL in higher education (Wilmot & McKenna, 2021). LCT can therefore be considered as a productive language to transcend SoTL as disconnected theories of learning and methodologies (Quin, 2012; Clarence, 2016) and appears to be a means to a better 'greater system' of meaning to draw on within higher education (Quinn 2012).

Additionally, in both vignettes, the ability to track and visualise practice enacting semantic gravity is greatly valued. Semantic gravity helps both Participant 1 and 2 to visualise the specialization classifications over time as cumulative knowledge building processes as they are applied in specific contexts. Participant 1 talks about the knowledge he has been 'accruing in (his) journey toward becoming a scholarly practitioner' and Participant 2 states that she has been inspired to consider her SoTL development as a 'continuous flow' and that this is transformative for her as she becomes aware that it was missing beforehand. She concludes that she wishes now to 'revisit' her past SoTL practice and incorporate it into 'future studies.' Therefore, these analytical tools have enabled both participants to be more aware that cumulative knowledge building is legitimate knowledge (Maton, 2013a). This newly found gaze or 'mode of thinking, acting, and being' (Dong et al., 2015, p. 8) also appears to be enabling for both participants in their roles on the academic staff development committee, giving them more legitimacy (Vorster, 2020). This legitimacy is built through the explanatory power of the LCT tools, what Participant 1 refers to as a 'meta' language, to enact the tools of the trade and the language to describe the 'rules of the game' for a member of the FDC.

Conclusion

Professional practice is based on shared knowledge, skills, and ways of thinking that can lead to improvement (Elmore, 2008). However, as argued in this article, higher institutes currently tend to lack an allencompassing 'greater system' to describe organizing principles of practice and map cumulative knowledge building processes in SoTL. The theoretical framework that we offer in this article provides translation devices to help to solve these serious issues. As members of the FDC, the next stage is to design and conduct a staff development workshop at our university to present how each of us enacted the two LCT tools. Therefore, this is just the start of the research, a piloting project. The two committee members who are newcomers to the framework will be acting as workshop facilitators along with the lead, and they will share their newfound views. It will be examined if this is an effective strategy to model to the entire faculty's staff, most of whom do not know LCT nor how the tools can be enacted. For the workshop, the lead's narratives, their evaluations, and the two other FDC members' vignettes presented in this article will be embedded as video or audio files in PowerPoint slides accompanied with specialization and semantic gravity figures shown in Figures 4 and 5. These slides will be uploaded into a shared repository online through Microsoft Teams before the workshop to allow for previewing. The findings from this workshop will be reported as the next phase in this multiple-case study action research project.

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MARK BROOKE, EdD, is lead of the faculty development programme at the Centre for English Language Communication of the National University of Singapore. He currently teaches and researches Content and Language Integrated Learning in higher education focusing on developing academic literacy through sport sociology.

DARON BENJAMIN LOO is a Lecturer and member of the Faculty Development Committee at the National University of Singapore's Centre for English Language Communication.

CHLOE WONG, MSc in Education, is an Instructor and member of the Faculty Development Committee at the National University of Singapore's Centre for English Language Communication.