

CHALLENGES IN DOING SOTL

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While the Scholarship of Teaching and Learning has a number of benefits for classrooms, programs, and institutions, there are five main challenges to doing SoTL.

Definitions of Scholarship

First, different researchers have differing conceptions of what is ‘good’ research. Research methodology, methods, data collection and analysis, and even the acknowledgement of what is recognized as data, may all be thought of as barriers to getting started in SoTL. While researchers are able to acknowledge the methodologies, and even carry them out, there is often still a sense of unease that the research being conducted is not rigorous compared to that of the discipline. As novice SoTL scholars, they need to be guided through the language and culture of a new field.

Being a novice

Despite being an expert in their discipline, researchers may still be novices, with regards to SoTL.

The distance they have to travel to SoTL, may also be influenced by their preceding disciplinary knowledge. Kelly, Nesbit, and Oliver (2012) make a compelling case for the transition from Science, Technology, Engineering, and Mathematics (STEM) to SoTL, citing a timespan of up to ten years to make the complete transition. It is important to see this transition as a graduated trajectory from novice to confident SoTL scholar. Using the 4M Framework, micro/meso/macro/ mega (Simmons, 2016), it is important to take measured steps in your SoTL work.

Forming a new identity

SoTL presents a number of challenges to faculty members. Working within an unfamiliar paradigm is the most obvious challenge; however, this can be broken down further to reveal the complexity of the challenge, which is further complicated by the relationship between the individual’s own disciplinary norms and those of SoTL. Evidence of epistemological and ontological shifts are subtle. The epistemological and ontological shifts central to SoTL learning (Cousin, 2006; Irvine & Carmichael, 2009; Meyer & Land, 2005) may be evident in the discourse and questions, but are often difficult to pin down to particular events, topics, or resources.

Importance of reflection

Novice SoTL scholars need, and request, time to discuss their developing conceptions of SoTL, the feasibility of research questions, the adopted methodology as well as methods, and the ethical considerations of pedagogical or curriculum research. Time to interact with others, especially as many

novice SoTL scholars feel isolated and foresee little support within their home departments or faculties, can help to increase the rigor of the SoTL project and the confidence of the researcher (Tierney, Aidulis, Park & Clark, 2020).

Student-centred dimension of learning

Trigwell et al’s (2000) Model of Scholarship includes the “conception” dimension of learning; whether it is the teacher or the student that is at the heart of learning. Many teachers construct ever more elaborate teaching strategies in order to address a range of student engagement issues. However, although they may demand a great deal of energy, it may leave staff frustrated if students still don’t improve, despite their efforts. Teachers make a substantial paradigm shift when they realise that it is the effort of the student that is important in learning (Tierney, 2017). This aligns with stages 2 and 3 of Biggs’ stages of teaching experience: what the student is; what the teacher does; what the student does. It can be a challenge to us as educators to understand that in order for us to teach effectively it is what the student does that results in learning.

“Education research is not rocket science, which is built on a structured, linear system with a straightforward set of factors which we can stick into a well-articulated formula to predict a clearly defined outcome. Rather, if we must make analogies to the physical sciences, we might do better to look to quantum mechanics and chaos theory. Such analogies will lead us away from the search for proofs of simple generalisable solutions to our collective problems, and towards the generation of rich understandings of the complex environments in which our collective problems are uniquely embedded.” (Regehr, 2010)

WHY THIS MATTERS

Novice SoTL scholars are situated in a complex network of personal, professional, and financial tensions. The institutional culture of a department, faculty, or university operates within and against this complex network. There are so many barriers to change (Hubball & Pearson, 2010; Webb, Wong, & Hubball, 2013) including entrenched systems of credit hours, scheduling, methods of teaching and assessment, departmental or disciplinary silos, administration systems, and reward systems that value research over pedagogical or curricular leadership.

There are two levels of institutional culture: the larger university level which may support SoTL initiatives and the pervasive local level which controls the first steps toward recognition, promotion, and merit. The local level of institutional culture is key in determining what research is done and how it proceeds.

WHAT CAN WE DO?

Higher education institutions need to foster institutional cultures that predispose, enable, and reinforce faculty members to actively engage in SoTL. This could be achieved through the development of an institutional culture that values scholarship in teaching and learning as well as disciplinary scholarship. Underpinning these recommendations is the need for a department, school, faculty, and university that values SoTL equally to disciplinary research. SoTL scholarship cannot be done as an 'off the side of the desk' process; those who try to do this struggle. It needs to be seen as part of professional culture in higher education and to inform all pedagogical and curricular changes. Providing SoTL scholars with the time, through differentiated workloads, strategic SoTL-based professional development, and resources for their inquiry serves to support superior quality work in the field.

Sustained support for SoTL

Kelly et al. (2012) tell us that it takes ten years to become enmeshed in the SoTL community. So a program, such as a PGCert, is a good place to start, but what happens after the program? A combination of formal and informal networks (e.g., communities of practice, book clubs, mentors), differentiated workloads, and possible advanced qualifications all serve to keep novice SoTL scholars continuing in the field. Many learned societies have education sub-committees in their formal structure, as well as supporting events and conference streams throughout the year. AdvanceHE also offers support and recognition through its fellowship scheme.

Reward and recognition

With the requirement of SoTL in the job description of teaching-focused faculty, there has to be recognition and reward, to incentivize academics, much the way that tenure and promotion do.

Disciplinary research vs. SoTL

All too often a false dichotomy is created by pitting disciplinary research against scholarship in teaching and learning; with disciplinary research seen a more legitimate form of scholarship. First, both fields have conventions for ensuring credibility (Billot, Rowland, Carnell, Amundsen, & Evans, 2017) and second, disciplinary research and teaching can benefit from the inclusion of SoTL research.

KEY TAKEAWAYS

Engaging with SoTL is challenging, as it requires paradigmatic shifts in understanding, which may clash with disciplinary norms and beliefs. However, it is also ultimately transformative and results in a clearer understanding of evidence-based teacher practice and student learning, leading to better student outcomes.

Complexity of social science research

As scholars who are learning to conduct research in a new field, novice SoTL scholars have to acknowledge the complexity of social science research (Regehr, 2010). Often this can take a long time as it takes a while for researchers to come to grips with the complexity of what they are doing.

At a local level, be it faculty or department, professional development programmes in SoTL need to support and sustain communities of practice, develop increased capacity for educational research, and support institutional cultures that stretch across disciplines. Developing a cohesive community of practice within and across the institution engages interdisciplinary support for novice SoTL scholarship. Rather than seeing the centre for teaching and learning as the only resources, novice SoTL scholars need time to discuss their developing conceptions of SoTL, the feasibility of research questions, the adopted methodology as well as methods, and the ethical considerations of pedagogical or curriculum research. Having institutional policies fostering SoTL is only useful if they are also supported at the local level.

As a field, SoTL scholars must address the institutional challenges while supporting educational leaders and teaching-focused academics as they navigate SoTL. This support needs to come in many forms including recognition, strategic mentoring, incentives, resources, and most importantly, time.

"We discovered that acknowledging the contexts, methods and metaphors that differentiate STEM from SoTL was a major step on our transitional journey; it allowed us to understand, and accept, the dualisms associated with these differing academic endeavours."

(Kelly et al, 2012, p.8)

REFERENCES

- Billot, J., Rowland, S., Carnell, B., Amundsen, C., & Evans, T. (2017). How experienced SoTL researchers develop credibility of their work. *Teaching & Learning Inquiry*, 5. Retrieved from <http://dx.doi.org/10.20343/teachlearninqu.5.1.8>
- Cousin, G. (2006). An introduction to threshold concepts. *Planet*, 17, 4-5.
- Hubball, H. T., & Pearson, M. (2010). Grappling with the complexity of undergraduate degree program reform: Critical barriers and emergent strategies. *Transformative Dialogues: Teaching & Learning Journal*, 3(3). Retrieved from http://kwantlen.ca/TD/TD.3.3/TD.3.3_Hubball&Pearson_Undergraduate_Degree_Program_Reform.pdf
- Irvine, N., & Carmichael, P. (2009). Threshold concepts: A point of focus for practitioner research. *Active Learning in Higher Education*, 10(2), 103-119. doi: 10.1177/1469787409104785
- Kelly, N., Nesbit, S., & Oliver, C. (2012). A Difficult Journey: Transitioning from STEM to SoTL. *International Journal for the Scholarship of Teaching and Learning*, 6, Article 18.
- Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49, 373-388.
- Regehr, G. (2010). It's NOT rocket science: Rethinking our metaphors for research in health professions education. *Medical Education*, 44, 31-39. doi: 10.1111/j.1365-2923.2009.03418.x
- Simmons, N. (2016). Synthesizing SoTL institutional initiatives toward national impact. *New Directions in Teaching and Learning*, 146(1), 95-102. <https://doi.org/10.1002/tl.20192>
- Tierney, A. M., Aidulis, D., Park, J., & Clark, K. (2020). Supporting SoTL Development through Communities of Practice. *Teaching & Learning Inquiry*, 8(2), 32-52. <https://doi.org/10.20343/teachlearninqu.8.2.4>
- Tierney, A. M. (2017). Threshold Concepts in Academic Practice: Engagement with the Scholarship of Teaching and Learning. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 12(2), 165-184.
- Trigwell, K., Martin, E., Benjamin, J., & Prosser, M. (2000). Scholarship of Teaching: A model. *Higher Education Research & Development*, 19(2), 155-168.
- Walker, G. (2013). A cognitive approach to threshold concepts. *Higher Education*, 65, 247-263. doi: 10.1007/s10734-012-9541-4
- Webb, A., Wong, T., & Hubball, H. T. (2013). Professional development for adjunct teaching faculty in a research-intensive university: Engagement in scholarly approaches to teaching and learning. *International Journal of Teaching and Learning in Higher Education*, 25(2), 231-238. Retrieved from <http://www.isetl.org/ijtlhe/index.cfm>.

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