

Conceptualizing SoTL: a Framework for the Field

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ABSTRACT

The emerging field of SoTL is an inherently interdisciplinary endeavor, embracing a diverse range of research methods. It desires to be hospitable to a range of disciplinary differences in world views. However, the field lacks coherence in its conceptualization and communication. Ongoing debates in the community concern the use of theory, as well as definitional questions of what constitutes SoTL and the nature of its purpose. This article offers a framework for conceptualizing the field, which attempts to broadly delineate the available theories underlying and methodologies appropriate to studying teaching and learning, while intending to be hospitable to a broad range of diverse disciplines. Further, the framework illustrates the tacit links between learning theories and methodologies, serving as a guide to potential approaches to SoTL work. The framework is illustrated with example SoTL studies. It is hoped that the framework will help to broaden the types of questions being investigated in the field, ground those investigations in appropriate theories and methodologies, and build interdisciplinary communication and understanding in the “trading zone” that is SoTL.

KEYWORDS

SoTL, field, methodology, learning theory, framework

INTRODUCTION

As an emerging and developing interdisciplinary field, the Scholarship of Teaching and Learning (SoTL) is rich with debate about its nature and purpose (Poole, 2013a). In order to define the field and communicate guidelines for good practice, many leaders in the field have developed criteria or taxonomies for defining and evaluating SoTL. Some criteria are written very generally, such as “clear goals, adequate preparation, appropriate methods” (Glassick et al,

1997, p. 36) or “methodologically sound” (Felten, 2013, p. 122). Others have developed taxonomies based on levels of analysis. For example, Nelson (2003) divides the field into reports on particular classes, reflections on many years of teaching experience, comparisons of courses or students across time, learning science, and summaries and analyses of sets of prior studies, while Hutchings (2000) delineates the oft referred to “what is,” “what works,” “visions of the possible,” and “formulation of new conceptual frameworks” (pp. 4-5). While simple enough to be inclusive of various disciplinary perspectives and methods, these descriptions do not help members of one discipline understand the perspective and methods of another, nor how “soundness” or “rigor” of method is evaluated. The lack of theory included in published work leads to an impression that the field is somewhat a-theoretical, which may make it quickly accessible to practitioners steeped in their own disciplines, but who may be less familiar with available theories and methodologies in researching teaching and learning. However, inquiry always flows out of a particular stance and worldview about, for example, how learning works, as well as methodological assumptions. Neglecting articulation of these weakens the work in the effort to make it more accessible, and suggests that a lack of rigour is acceptable in SoTL.

In this paper, we broadly outline existing categories of learning theories and research methodologies, and from these develop a framework for the field based on the intersections of different research approaches and perspectives on learning. The framework is then explored using a variety of published SoTL studies.

What is SoTL? The Problem of Definition

Some definitions of SoTL acknowledge the importance of theory but have a more narrow perspective on the nature of SoTL. Dickson and Trembl (2013) state that a SoTL practitioner must “integrate findings into relevant pedagogical theory and research” (p. 9); however their definition of SoTL is a quantitative, empirical one of measuring the impact of a teaching intervention. In

fact, in a 9-chapter special issue on “Measuring Systematic Changes to Teaching and Improvements in Learning” (Gurung and Wilson, 2013), containing 3 chapters on experimental research design and one on statistics, there is only a brief, one-paragraph acknowledgement that “qualitative studies are complementary and just as useful” (p. 31). If a new practitioner were to come upon this resource early in their exposure to SoTL, they might have a very narrow understanding of the field and might never “enjoy the benefits of studying learning and teaching from diverse research and theoretical perspectives” (Poole, 2013b, p. 140).

In contrast to the experimental view of SoTL described above, some contend that questions about what works and generalizability are simply not answerable empirically in SoTL (Barrow, 2006; Grauerholz and Main, 2013). While not impossible, control group studies are also difficult to design ethically in a SoTL context (Healey et al., 2013). However, as the field begins to embrace increasingly diverse research methods (eg. Hubball and Clarke, 2010), the question of “what is SoTL” is still alive. Recently, Grauerholz and Main (2013) worry that the SoTL movement will be “shaped by (hegemonic) standards that privilege certain types of methodologies over others” (p.152), and yet McKinney (2013), in describing the increasing interdisciplinarity of SoTL, wonders “at what point – if any – does such work become something other than SoTL?” (p. 3) We argue, as does Poole (2013b), that by embracing a broader definition of research for the field, we can get past our disciplinary debates and focus on understanding student learning. In fact, in bringing forward a range of disciplinary approaches to methodology, the work is strengthened and diversified and may provide additional perspectives and entry points. However, those approaches should be explained and justified for a wide SoTL audience. We propose that SoTL should be defined by the goals of deepening our understanding of student learning and, as Kreber (2013) advocates, exploring not only the “effectiveness but also the desirability of what we do in and through higher education” (p. 858).

Given the definitional and theoretical debates within SoTL, it is surprising to us that the field does not draw more often upon educational research literature, which uses many lenses for examining learning. When comparing SoTL to “traditional educational research” and arguing for the value of rich description versus generalizability, SoTL authors often seem to be referring to educational research within a quantitative social science framework (eg. Bernstein, 2010), but do not make this explicit. For example, in arguing for the “fallacy of control groups in classroom research”, Grauerholz and Main (2013) incorrectly reference Kanuka (2011) when they decry that “many SoTL researchers continue to define SoTL as an extension of educational research, with methodologies consistent with those in traditional disciplines” (p. 156). In fact, Kanuka’s article is more focused on the need for theoretical frameworks and building on existing literature in SoTL and less on methodology. However, in a brief discussion of typical methodologies in the field of education, she does mention not only scientific and positivistic methodologies, but also naturalistic and interpretive methodologies as well as critical theory (please see below for descriptions). In other words, Kanuka does not argue that SoTL should be experimental or empirical in design at all. In response, we argue that the field of SoTL could benefit from a better understanding of the range of lenses and methodologies used in educational research.

We know from learning science that organization of knowledge into schema is key to learning a discipline (Ambrose, 2010; Leamson, 1999; Zull, 2002) and we believe is key to understanding the field of SoTL. Lack of a coherent and systematic way of conceptualizing SoTL can be confusing, especially for relatively new practitioners in the field (Simmons et al., 2013) and is limiting the advancement and/or acceptance of the field (Boshier, 2009). In summary, we agree with McKinney’s claim (2013) that:

We need more resources that offer examples, applications and discussions of critical issues of SoTL in disciplines beyond our own and in interdisciplinary SoTL efforts. Such

resources help broaden our horizons and encourage cross-disciplinary collaborations by sharing conceptual frameworks, methodologies, key results and practical applications that may be useful in our own classrooms and SoTL research. (p. 3)

Therefore, the purposes of this article are to provide an inclusive definition and framework to conceptualize the field, to raise awareness of theories and methodologies suited to particular investigations, to illustrate the diversity of types of questions being investigated in the field, and to help build interdisciplinary communication and understanding in the “trading zone” that is SoTL.

THEORETICAL AND METHODOLOGICAL PERSPECTIVES FROM THE FIELD OF EDUCATION RESEARCH

The field of education research draws upon a range of learning theories and methodologies, which are mostly absent in SoTL discourse. If SoTL is an inquiry about deepening our understanding of student learning and development, rather than only measuring changes in learning due to a teaching intervention, then a range of methodologies and theoretical frameworks becomes available to us.

SoTL has been described as different from the field of education because it is a “methodological and theoretical mutt” (Felten, 2013, p. 121) in that it reaches across disciplines, methods and perspectives rather than being “siloe” in one particular discipline, field, or methodology. We find this misleading since the same could be said of the field of education research and of qualitative research in general. While it is true that there are siloe areas of work in education research ranging from that of quantitative researchers to critical theorists, other researchers in the field also use mixed methods and multiple theoretical frameworks. Yet in educational research using mixed methods, there is still an understanding that different methodologies align with certain theoretical perspectives and methods of collecting data, and are

determined by the kinds of research questions one wishes to ask about learning. In other words, methodological choices are not entirely separate from choices of theoretical perspective and world view, so while the field as a whole may be a mutt, any individual SoTL study still needs to be consistent in its methodology, method, and perspective. SoTL researchers can benefit from being aware of their philosophical approach and theoretical assumptions because it will help them design better studies and also more strongly articulate their findings, especially to colleagues with different world views. This will also benefit the field, as theoretically grounded work is also a way for SoTL to achieve broader impact across studies and make new contributions to knowledge about teaching and learning beyond single classrooms.

Finally, the role of theory is very different in quantitative and qualitative research. In a quantitative study, theory is identified early and informs the research design by helping to identify a hypothesis and to select appropriate measurements. In contrast, in qualitative research, theory may be used much later as a lens through which to interpret the findings. One of the strengths of qualitative research is that its open, emergent approach allows for the identification of new phenomena that may not have been anticipated. Hence, a qualitative or mixed methods study might start out with the intent to better understand students' stages of cognitive development related to a particular disciplinary concept, but end up uncovering an unanticipated finding related to gender or motivation. For this reason, as SoTL continues to embrace more qualitative research approaches, we expect that it will become more and more important for practitioners to be aware of different theoretical frameworks within which to place their findings.

Learning Theories

According to Kanuka (2011), two facets of theory are necessary to identify in SoTL studies. The first is the theoretical framework, usually a learning theory, upon which the researchers are basing their assumptions, either explicitly or tacitly. The second is methodology.

In terms of learning theory, Kanuka notes that typically, SoTL studies rely on a superficial mention and application of deep and surface learning (p. 4). In contrast, the body of learning theories available is enormous. These may be divided broadly into behaviorist, cognitivist, constructivist, and humanist approaches. It is useful, when reading a SoTL study, to understand the basic assumptions of the researcher in terms of how learning works. If it is not specifically stated, the assumptions of the researchers can often be inferred by the type of evidence collected as well as the research question. In what follows, we briefly outline the major categories of learning theories and methodologies before providing examples of SoTL studies in this framework. We have deliberately oversimplified to provide an introduction to those who may be new to learning theory and methodology; we also offer references for more information.

Behaviourism

This perspective on learning developed in the early 20th century, and suggests that all behavior is based upon external stimuli – or the idea that environmental changes lead to behavioral change as evidence of learning (Gurung & Schwartz, 2013, p. 35). Behaviour is seen as being shaped by positive and negative reinforcement. “Pavlov’s dog” is a well-known example demonstrating classical conditioning, leading to a physiological response (Gurung & Schwartz, p. 35). B.F. Skinner further developed the theory of operant conditioning, which is more applicable in classroom settings as it focuses on the shaping of behaviour (rather than physiological responses) through reinforcement, “if the reinforcer is contingent upon the learner’s behaviour” (Naested, Potvin, & Waldron, 2004, p. 74). While behaviourism is currently less ‘fashionable’ in educational research circles, we see many vestiges of the approach in our schooling systems, such as the reward of grades for student work. Many studies in fact, particularly those that take approaches borrowed from the field of Psychology often take a more behavioural approach. In

these studies, learning is defined in behavioural terms, for example, how students might be motivated to study more frequently.

Cognitivism

This theory considers learning as a mental process, involving the creation of schema, structures, and models. The mind is seen as a “black box” or information processor, with “a focus on a person’s own mental activities rather than on the environment” (Gurung & Swartz, 2013, p. 35). It replaced behaviourism as the dominant paradigm in the 1960s. Cognitivist theories prioritize memory, thinking, and problem-solving, and “directed psychologists to examine the determinants of learning and memory, with an emphasis on understanding the acquisition of knowledge in humans” (Gurung & Schwartz, 2013, p. 36). Learning is defined as a change in a learner’s schemata. Benjamin Bloom’s (1956) well known taxonomy of educational goals (knowledge, comprehension, application, analysis, synthesis, and evaluation), or the current work in Decoding the Disciplines (Middendorf & Pace, 2004) are examples of cognitivist perspectives in practice.

Constructivism

Constructivism builds on cognitivism, viewing learning as an active, “constructive” process. New information is linked to prior knowledge, and that subjective representations of reality are created. Past experience and cultural factors influence learning. Important early work in constructivism was done by Vygotsky, Piaget, and Dewey, often considered the father of experiential learning (Naested et al., 2004, p. 85). This paradigm is dominant in the K-12 educational system in terms of espoused philosophy, although not always evident in practice. Social constructivism, which recognizes the impact of interaction with others on learning, is a further development. Notions such as ‘active learning’ and “communities of practice” (Lave and Wenger, 1991) are rooted in constructivist and socially constructivist principles.

Humanism

Humanism, a paradigm that also emerged in the 1960s, is based upon ideas of freedom, dignity, and potential of human beings. Maslow's hierarchy is the well-known model (Maslow, 1970, cited by Naested et al., 2004, p. 94). The worldview here is that people act with intentionality according to their core values. Focusing on the whole learner, rather than only the thinking aspect of the person, is key. Humanist approaches are most common in the caring professions such as social work.

Methodology

The second theoretical element that needs articulation is the methodology of the study. This should be seen as distinct from method, which is simply a description of how the participants were selected, the data collected and analyzed. Methods are what were done in the study. Methodology explains why it was done this way, and again articulates the assumptions and epistemology (world view) of the researchers (Burton, 2002, p. 4). For example, while many SoTL studies may collect work samples or interview students, what is done with this data and what is looked for depends largely upon the methodology. If a more empirical approach is taken, measurement of change will be sought, whereas in a critical study the researcher is attuned to questions of privilege and power. However in most qualitative approaches, generalizability is typically not an aim of the research but rather, a rich, contextual ("thick") description to ensure trustworthiness. The onus is then on the reader to determine whether the findings are transferable to other contexts. Broad categories of methodological approaches are briefly described below.

Quantitative

Quantitative studies typically take a positivist perspective, which assumes that there is a single truth or knowable world, which is independent of context, observer, or the observed (Chism, 2010). This type of research is hypothesis-driven and its purpose is to find relationships

among variables and/or to define cause-and-effect. The methods and variables are defined in advance, and the research design must address validity, reliability, and generalizability (Gurung & Wilson, 2013). A more recent development can be considered post-positivist, whereby the influence of the researcher's assumptions is recognized, and in which "one can only say that current data is consistent with an assumed truth" (Chism, 2010, p. 2). Objectivity is still sought.

Qualitative Empirical

Some research uses qualitative data sources and does not have an experimental design, but is still empirical in its approach; its underlying goal is to discover aspects of an observable reality, and it attempts to be as objective as possible in its approach. In a SoTL study, the emphasis in data collection is on observing learning as demonstrated rather than inferring that learning has occurred or asking to students to describe their perception or reflection upon learning.

Naturalistic

Naturalistic studies reject the notion that controlling for variables is desirable or even possible in research, but rather pose that each research situation is unique and that data should be gathered from their situated context (Lincoln and Guba, 1985). Anchored in anthropology, research approaches such as ethnographies are used to study a given culture, with an emphasis on fieldwork and participant observation. These approaches can be fruitfully applied to teaching and learning contexts.

Interpretive

Interpretive approaches derive knowledge claims from the interpretation of experiences, and thus do not try to prove generalizability at all, but instead assume that social reality is locally and specifically constructed (Lincoln and Guba, 1985), and that the knowledge produced is idiographic in nature. In other word, multiple subjective realities are possible. In interpretive

methodologies, methods and approaches emerge and are adjusted during the study. Rather than judging interpretive research on generalizability, quality in interpretive research must be judged through the worth of the study's findings to others in different contexts. Using Hutchings' (2000) taxonomy, interpretive approaches would be considered a "what is" type of approach. Theories of learning that align with this methodology tend to be constructivist and social constructivist perspectives. Hermeneutic, narrative inquiry, phenomenographic and phenomenological approaches are examples of interpretive methodologies.

Critical Theory

The critical perspective examines power relationships present in society, and therefore recognizes truth in multiple subjective realities, since truth defined by those in power is different than for those who are marginalized. Kreber (2013) suggests that discourse in SoTL has been so oriented to "what works" that it tacitly ignores questions of social justice and ethical considerations. She argues that such questions are inseparable from "what we think we are committed to in the scholarship of teaching and what we consider its purpose to be" (p.858). She fruitfully draws upon the work of Hannah Arendt and frames SoTL as *action* rather than *work*. This perspective then leads us towards a critical approach, which is designed to illuminate inequities, and could ask questions about race, class and gender and how they play out in a pedagogical space.

Postmodern

Postmodern analyses include diverse and contradictory critiques that "resist, subvert, and refuse any structural formation" (Denzin and Lincoln, 2013, p. 455). Its discourses are deconstructive in that they seek to make us skeptical about beliefs concerning truth, knowledge, power, the self, and language that are often taken for granted. Their purpose is to deconstruct

existing ‘grand narratives’ or theoretical frameworks that describe social behavior, and the outcome is a reconceptualized description of a phenomenon.

CONCEPTUAL FRAMEWORK FOR SoTL

To address the issue of the lack of an inclusive conceptualization of the field of SoTL, and to demonstrate how methodological and theoretical perspectives can be aligned, we used the two spectrums described above to create a two-dimensional framework, grounded in the current and diverse methodological practices of the field. Therefore, to demonstrate and test the framework, we began by mapping to the framework a selection of recent publications from SoTL scholars in various disciplines at Mount Royal University (Figure 1), chosen to demonstrate variety in methodology and perspectives on learning. To fully illustrate the framework, we also describe two more studies to fill in the gaps. All studies are briefly summarized below, with references provided, and are described in order starting from the top left of the framework, moving down and to the right. Readers are encouraged to examine each publication in more detail if they desire to gain a full appreciation of the nature of these studies and their approaches and outcomes.

<insert Figure 1 here>

A. McGrath, A. (2014) Just checking in: The effect of an office hour meeting and learning reflection in an introductory statistics course. *Teaching of Psychology*, 41(1), 83-87.

McGrath’s (2014) study of students’ learning in a psychology statistics course took a quantitative, experimental approach. Recognizing the value of professor-student rapport as well as asking students to reflect on their learning, McGrath devised an intervention which she called a learning check-in, where students were required to have an individual meeting with her

followed by completing a reflection form which asked them to assess their own learning and behaviours, and to develop a plan to succeed in the course. Students were randomly assigned into two groups that had the learning check-in at different times in the semester. The effect of the intervention was measured by performance on several tests, which also allowed for checking the equivalency of the two randomly assigned groups.

We place this study primarily in the behavioural category since the intervention was largely targeted to improving students' study habits. The researcher hypothesized that based upon previous research, the opportunity to build professor-student rapport would improve learning outcomes – in this way rapport becomes a motivator for changes in behaviour. In the reflection, students were asked “to (1) assess their learning to date; (2) consider behaviours that help and interfere with their learning; (3) identify three behaviours to adopt, change, continue, or stop to succeed in the course; and (4) develop a study plan for the upcoming test” (p. 84). The study had a controls built in, including measures to control for instructor bias and “expectancy effects”.

This kind of approach is common in Psychology and is a good example of a quantitative methodology, where statistics are used to demonstrate results. Cognitivist assumptions are also intrinsic to the study, since demonstration of the effectiveness of the learning intervention was measured by test performance.

B. Miller-Young, J.E. (2013) Calculations and expectations: How engineering students describe three-dimensional forces. *The Canadian Journal for the Scholarship of Teaching and Learning*, 4(1).

Taking an empirical and qualitative approach to methodology and cognitivist learning perspective, Miller-Young (2013) was interested in the difficulties first-year engineering students experienced when learning to visualize the three-dimensional structures in their textbooks. Interested in capturing the students' thinking processes early in the semester, Miller-Young asked

students to participate in a think-aloud interview, a protocol from cognitive psychology where participants are asked to talk out loud about what they are thinking while working on a task (Streveler et al, 2008). By thematizing the think-aloud transcripts, Miller-Young was able to identify three major difficulties students experienced when learning to visualize the drawings in their text, and also found evidence of these difficulties in the students' coursework. The intent of the study was not to test a teaching intervention, but simply to identify typical challenges students encounter when learning the skill, so that instructors can be more responsive to these difficulties.

With this cognitivist approach, the researcher was primarily interested in gaining better access to and understanding of learning processes as they occur – how students “think through” a complicated problem. The study is empirical because the data collected were observations of students, while the data collected was qualitative in nature and analyzed through a coding rather than statistical process.

C. Seitz, D. (2004) *Who can afford critical consciousness? : practicing a pedagogy of humility*. Creskill, NJ: Hampton Press.

As a socially conscious middle-class writing teacher, Seitz (2004) wondered how much he might have misread some students' motives and social meanings in their critical writing work because of his own upbringing and educational training. After analyzing his own students' work in terms of instrumentalism, difference and resistance, and questioning his own persuasive authority, he subsequently conducted ethnographic research with working class, minority and immigrant students in a colleague's class about women in the third world. Seitz used classroom (field) observation and student interviews, and also met regularly with his colleague to discuss her views of particular students and classroom dynamics. The book chronicles not only the findings of the research but also Seitz's pedagogical responses to and reflections on the issues raised.

Because students were asked to write individually in the courses, and the main focus of study was how students did or did not integrate ideas and values from the course into their lives, we place this study in the constructivist realm. The methodology is primarily naturalistic since Seitz describes himself as “an anthropologist studying culture that develops in the class” (p. 45), although as one might surmise from the topic and title of the study, there are critical perspectives as well. Seitz explicitly describes his research as ethnographic and discusses the importance of “membership role” (p. 45), and being a participant-observer, which are important aspects of research in anthropology. He also argues that the ethnographic methodology’s emphasis on inductive theorizing helps him as a teacher to remain attentive to the complex and varying situations in his classroom and students.

D. MacMillan, M. (in press) Student connections with academic texts: A phenomenographic study of reading. *Teaching in Higher Education*.

As librarian teaching a research methods class for Public Relations, MacMillan (in press) was interested in ways to help students read scholarly materials at a deeper level by encouraging them to make connections with prior knowledge. She designed an assignment where students were required to make and record such connections as part of an in-class reading activity, and used a phenomenographic approach to analyze the variation in what sparked connections and what kinds of connections students made, in terms of both content and depth. The outcome of this study was a deeper understanding of students’ reading processes, and suggestions for ways of improving students’ ability to engage more deeply with academic texts.

Phenomenography is an interpretive approach, but one that does not start with any preset categories in mind. MacMillan explicitly states that phenomenography’s emphasis on variation was congruent with the goals of the study, and its focus on relationships was congruent with her constructivist understanding of learning. These connections result in a coherence to her study.

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

In a study of students' choice in reading strategies, Manarin (2012) also took an interpretive approach, but with a more constructivist perspective, to examining students' reflective reading logs. In a course on critical writing and reading where she provided direction, prompts and feedback, Manarin had students write ten reflective log entries where they described how they read different essays, and reflected on the choices they made. Using her own disciplinary method of close reading and an open coding and re-coding process, she identified five categories of actions students took in reading, and use patterns based on purpose of the reading and whether the content was something students could personally connect with. She reports that she purposefully did not try to track patterns of change in strategies by the students as an objective observer, which would have been a more empirical approach, but deliberately intervened when she found students' strategies to be lacking and selected readings that would "force students away from some of their habitual choices" (p. 287).

We placed this study in the constructivist/social constructivist space, because of the recognition that learning, learning about reading in this case, is done contextually and in conversation with others (in this case, mainly through feedback from the instructor on the reading logs). The importance of the students' prior learning experiences is acknowledged. A dialogical process in the reading logs is described. The researcher also writes consciously from her own vantage point, recognizing the importance of her perspectives, assumptions, and in a sense, participation in the study – her assumptions are explored but not controlled out, and she intervened when she felt it was pedagogically necessary. This then, is an interpretive approach.

F. Carey, M. (2012) In the valley of the giants: cultivating intentionality and integration. *International Journal for the Scholarship of Teaching and Learning*, 6(1).

In a first year General Education Communities and Societies course, Carey (2012) investigated whether student intentionality and integrative learning could be cultivated by reflective journal writing and instructor prompts. Over the course of the term, students responded to questions such as: “What do you bring to this learning experience?”; “What grade do you expect to get from this course – why?”; and “Are you a deep or a surface learner – why?” (p. 5). A constant comparison coding approach was used, looking in the journal reflections for themes of self-awareness, what works, and affect as indicators of intentionality, and commentary on connections to school and life as evidence of integration. From her findings, Carey concludes that prompts did cultivate intentionality in students and also suggests that students are well aware of their movement between deep and surface approaches to learning to achieve different goals in different courses across their academic careers.

While the prompt “What do you bring to this learning experience?” also has constructivist elements, the focus in this study was on the values of the learners and how that influenced their approach to learning. The researcher was interested in self-awareness, and the goals and needs of the learner. She articulated insights about her own growth as a teacher through the experience of conducting the study. Because of the focus on intentionality and the whole learner, and the context-dependent telling of individual stories or “many truths”, we place this study in the humanist and interpretive realm.

G. Helberg, N., Heyes, C., & Rohel, J. (2009) Thinking through the body: Yoga, philosophy, and physical education. *Teaching Philosophy*, 32(3), 263-284.

This article describes an experimental course cross-listed between Philosophy and Education, entitled “Thinking through the body: Philosophy and Yoga” and the experiences of its professor and students. The course was designed to address a perceived gap between teaching theory and practice in teaching philosophy of the body, which was the oft-neglected idea that

movement could be philosophical, and that philosophy could be learned through movement. The course consisted of lectures and discussions of various readings, and also a weekly yoga practice. Students were encouraged to approach the texts, as well as their experience, as embodied subjects. The writing of the paper was a collaborative undertaking resulting from a small group discussion of both the professor's and students' experiences of the course. Through description and reflection on these experiences, the article demonstrates how what was learned by reading texts transferred to embodied knowledge, and vice versa. The article discusses both the professor's and the students' unease with evaluating the yoga practice, since students were being asked to "refrain from judging themselves while nevertheless being judged" (p. 271). Another tension inherent in the course was that students were asked to reflect and write about their practice experience, while immersion in meditative practice demands that the mind be still and detached.

This paper was chosen as another exemplar of a humanistic perspective because of its whole learner orientation, focusing not only on intellectual development, but also on spiritual and physical knowledge. The course itself introduced students to a phenomenological study, Leder's *The Absent Body*. This text is used as an important foundational literature both for the course and the study. Phenomenology is oriented towards embodiment and creating meaning from sensory experiences, and the breaking down of the Cartesian dualism between mind and body. Phenomenology is also a research methodology concerned with describing the "essence" of phenomena, and locates within an interpretive frame.

H. Easton, L. and Hewson, K. (2010) Reflections on the interplay of race, whiteness and Canadian identity in a film studies classroom. *Reception: texts, readers, audiences, history*, 2, 116-148.

In a film studies class with a focus on race and representation in Hollywood films, Easton and Hewson set out to encourage, engage with and better understand students' readings of several films. Students' readings were made evident through journals, group discussion, on-line discussions and focus groups. After discovering that the students were indeed attuned to critical discourses of race but have negotiated these into a form of liberal tolerance with underlying values of individualism, the authors argue that in order for cultural studies' approaches to have power in the classroom, more attention must be given to the way students' pre-existing experiences of race can readily produce performances of critical readings of film texts (p. 119). They discovered that students were able to take a critical perspective when discussing black-white stereotypes and racism after watching Spike Lee's *Bamboozled* (2000), but remained critical and were unable to move to a reparative reading of Marc Forster's *Monster's Ball* (2001). They also noticed a double spectatorship in that their Canadian students were able to perform a critical reading of race and representation when talking about "other people's" (American) racism, but were unwilling to connect to personal investments or to recognize the problems of race in their own country. Thus, they criticize the "model of outcomes-based education where students learn to become adept at performing outcomes at a cognitive level without necessarily integrating those outcomes within affective frameworks" (p 143). Finally, they came to realize that their goals for student reparative reading were more about their own wish for white repair.

This kind of study is unusual in the SoTL realm, and yet important as Kreber asserts to get beneath "what works" and to ask questions about why, why not, and who decides. Questions of power and privilege in the classroom largely go unasked, so far, in the SoTL landscape. This study is an example of a radicalized critical stance, which means that it asks deconstructive questions about power, in this case in relation to race. The researchers consciously pursue a

“transformative critical pedagogy” (p. 118), while their analysis deconstructs and asks unsettling questions of themselves and the reader.

These eight very different SoTL studies demonstrate a range of research approaches and (often implicit) perspectives on learning, and are used to illustrate a conceptual framework for the field. We hope that this framework might engender better communication, understanding, and appreciation between disciplines and research traditions. It may serve as a resource for new practitioners to understand the field, and where their own research tradition can find a point of entry into the SoTL landscape. Finally, we suggest that this framework might serve as a starting point to map changes in the field over time.

CONCLUSIONS

This article has broadly outlined existing categories of learning theories and research methodologies, and has demonstrated that they are useful to conceptualize the field of SoTL. To address questions in the field about generalizability in SoTL, we have described many qualitative research methodologies which can be used in SoTL, which are well-established and which make no claim to achieve generalizability in their findings. We implore SoTL researchers to move beyond the generalizability debate and broaden the range of perspectives they draw from in their research methodologies.

The example studies provide evidence that SoTL does, in fact, reach across multiple methodologies and theoretical perspectives. The examples not only illustrate our proposed framework but also demonstrate the limitations of the “mutt” metaphor in that methodologies and theories must be internally compatible. For example, a study that seeks to understand the development of professional identity would benefit from an interpretive approach rather than a quantitative instrument.

We argue that in expanding understanding of underlying theories and methodological ranges we can expand the kinds of questions that can be addressed in SoTL. SoTL researchers might begin to wrestle with and address Kreber's criticism (2013) that "the discourse of evidence-based practice does not leave room for questions about the purposes and goals of our educational endeavours," arguing that "our understanding of evidence could be broadened so as to intentionally encourage a wider range of questions for enquiry" (p. 858).

Methodologies and exemplars that have been highlighted here only scratch the surface of possibilities for further development of SoTL. The purpose of this paper is not to provide everything one needs to know about teaching and learning research methodologies and theoretical frameworks of learning. Rather, it is our hope that we can advance the discussion of scholarship of teaching and learning past definitional and epistemological debates by describing the current context and practice of this emerging field, and by placing it within existing frameworks for research on teaching and learning. Considering that consensus can be an indicator of the degree of development of a field (Pfeffer, 1993), we argue that it is important to communicate and generate understanding of different assumptions about knowledge and learning, which necessitate particular research questions and methodologies in SoTL. Not only will our framework help SoTL practitioners identify theory and methods which are appropriate for their questions, but it will also facilitate the explicit communication of such to both our SoTL and our disciplinary colleagues.

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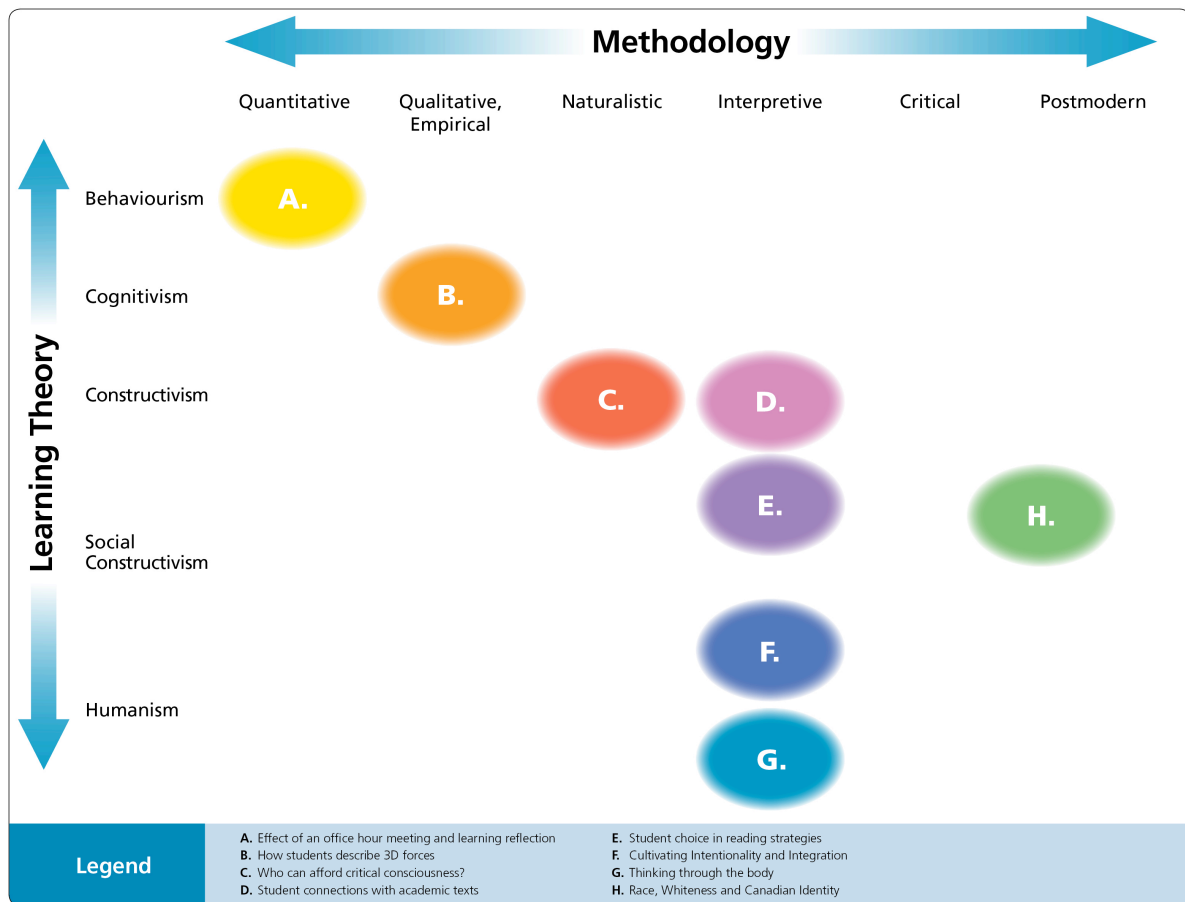


Figure 1. A methodological and theoretical framework to conceptualize the field of SoTL, illustrated with example studies.