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Moving From "Good" to "Great" SoTL: The Importance of Describing Your Research Epistemological and Ontological Traditions in Your SoTL Scholarship

ABSTRACT

This paper explores the metaphor of the "Big Tent" in the context of the scholarship of teaching and learning (SoTL), highlighting the metaphor's limitations in capturing the complexities and tensions within the scholarly community. This paper delves into the conflicts arising from differing methodologies, epistemological stances, and disciplinary boundaries, viewing them as manifestations of intellectual vigor rather than weaknesses. The paper emphasizes the role of academic training in shaping our perceptions and biases towards educational research and underscores the need for acknowledging these biases in order to foster meaningful dialogue and bridge the diversity in SoTL. We revisit past research on the principles of good practice in SoTL and the shifted focus from "students" to "learners," acknowledging faculty as perpetual learners in improving teaching practices. The paper proposes an additional principle to elevate SoTL from "good" to "great": the explicit identification of our SoTL lens. This involves acknowledging our biases, disciplinary perspectives, and methodological preferences in order to enhance the transparency and richness of scholarly conversations. The paper concludes with a call to embrace self-awareness and invites others to do the same, aiming to refine our collective vision and make SoTL endeavors not just inclusive but truly transformative.

KEYWORDS

research lens, paradigm, epistemology and ontology, pluralism

INTRODUCTION

The metaphor of the "Big Tent" has long been associated with the scholarship of teaching and learning (SoTL). It conjures an image of inclusivity, where diverse perspectives converge under a shared canopy. However, as we gather within this metaphorical tent, we must recognize that it does not fully capture the complexities and tensions inherent within our scholarly community.

Conflicts simmer beneath the surface—disagreements over methodologies, epistemological stances, and disciplinary boundaries. These conflicts are not signs of weakness but rather manifestations of intellectual vigor. They challenge us to engage critically with our assumptions and biases. Our academic training shapes our lenses, the filters through which we perceive educational research. These lenses influence what we see, value, and prioritize. To appreciate the scholarship of others from distinct disciplinary traditions, we must first acknowledge our own biases. Only then can we engage in meaningful dialogue and build bridges throughout the diverse landscape of SoTL.

In this paper, we revisit Felten's (2013) "Principles of Good SoTL'"—a foundational framework for rigorous educational inquiry. We commend Webb's (2019) suggestion, which shifts our focus from "students" to "learners," recognizing that faculty, too, are perpetual learners in the realm of improving teaching practices. As we continue to grow the field of SoTL, we propose an additional principle to elevate SoTL from "good" to "great": explicit identification of our SoTL lens. By explicitly acknowledging our biases, disciplinary perspectives, and methodological preferences, we enhance the transparency and richness of our scholarly conversations. Through this work, we embrace the challenge of self-awareness and invite others to do the same. Together, we can refine our collective vision, making our SoTL endeavors not just inclusive but truly transformative.

WHAT IS MISSING FOR "GREAT" SoTL PRACTICE

In a study of novice SoTL leaders, Webb (2019) found that a lack of shared language, and the resulting impact on a scholar's ability to participate in discourse with experts, was a common barrier to understanding the field of SoTL. But who is responsible for addressing this known barrier? Boyer (1987) has said that "scholarship is not an esoteric appendage; it is the heart of what the profession is all about. All faculty, throughout their careers, should themselves remain students. As scholars they must continue to learn and be seriously and continuously engaged in the expanding intellectual world" (131). New scholars, undoubtedly, have a central role to play in developing their familiarity with established terminology and concepts. Yet, in this work they should not journey alone. Seasoned SoTL pathfinders and trailblazers support those who join the field by making explicit the ontologies and epistemologies that ground our work.

Ontology

Ontology is a branch of philosophy that focuses on the nature of being and existence. It seeks to identify and explore the properties and relations of entities. Ontology describes our position on what sensory information means as well as the necessary components of a valid argument. Within SoTL research paradigms, ontology resides at the top of a hierarchical structure that also includes epistemology, methodology, and methods. Identifying and acknowledging the ontological assumptions of SoTL is foundational to its study. When we do not carefully reflect on ontology, we can ultimately make methodological choices that are illogical, resulting in research that is theoretically incoherent. For many SoTL scholars, a key ontological consideration takes the form of whether reality is objective or subjective (Bryman 2016).

Epistemology

Within the dichotomy of objective and subjective reality, there is an array of theoretical lenses that describe sets of rules for identifying, gathering, and validating knowledge. The study of these lenses is called epistemology. For example, a scholar adhering to an objectivist ontology may embrace an epistemological position that (1) the nature of the system under study can be known, (2) knowledge about properties and relations of the system is only reliable when be collected through observation, and (3) data must be reproducible in order to be considered reliable. In contrast, a scholar that uses a subjectivist ontology might employ a epistemological position that (1) the behavior, biases, and feelings of the researcher and those of the individuals being studied impact all observations, (2) knowledge about properties and relations of the system under study are thus subject to interpretation within pre-established parameters (e.g. a theoretical framework), and (3) due to the highly contextual nature of the work, reproducibility is not a validation criterion for the data or conclusions.

How your SoTL lens influences your study design

Taken together, the ontological and epistemological bases of a research project inform the appropriate methodology and methods. Furthermore, these lenses govern the types of research questions the scholar can explore through a theoretically-sound study.

Consider a research project that seeks to determine if an alternative pedagogical approach improves student attainment of a course learning objective. How will attainment be measured? An objectivist lens aligns well with the use of a metric that is established prior to participant recruitment. Within that lens, the metric is assumed to be consistently applied, meaning that its use is not dependent on the identity, experiences, or biases of the researcher or the research participant. The researcher employs one or more logical strategies (e.g. inductive, deductive, abductive) within one or more parts of the study, such as generating a hypothesis or formulating a conclusion. Regardless of the logic used, the rigor of the study would then be intimately connected to the metric and whether it successfully functions as an objective measurement of student attainment.

A SoTL project that seeks an equivalent understanding of student attainment, but through a subjectivist lens, would reject the notion of an objective metric. Instead, the means for answering the research question would rely on the expertise of the researcher as they interpret collected observations or arguments. Often, this approach to analyzing the data on student attainment is couched within an existing theoretical framework. As with the objectivist approach, the subjectivist utilizes one or more logical strategies in the study. In contrast to the objectivist, the subjectivist is generally more explicit about the relation between their positionality and the conclusions emerging from the project. This explicit self-awareness of the researcher-subject-interpretation triad heavily impacts the study's rigor.

Haigh and Withell (2020) offer an effective example of explicit articulation on one of the researcher's ontological and epistemological lenses in relation to a SoTL study. The paper describes a project that sought to investigate a strategy for enhancing curriculum toward a specific aim: to facilitate students' development of design thinking expertise. Withell determined that a critical realist research paradigm (Bhaskar [1975] 2013) best aligned with their own, and the authors devote a brief but effective portion of their manuscript to describing the relevant ontological and epistemological assumptions. As demonstrated in this paper, employing reflexivity in the research design practice supports efforts to align our ontological assumptions, epistemological beliefs, and employed judgment systems within a SoTL project.

How your SoTL lens influences your reading and dissemination

Over a decade ago, Hubball and Clarke (2010) described benefits and challenges that exist within multidisciplinary research contexts, such as those found within the field of SoTL. Within these contexts, an important role for authors is making their ontological and epistemological assumptions explicit for the benefit of editors, reviewers, and readers. In turn, the other parties are responsible for engaging in the necessary close reading to successfully navigate philosophical traditions that differ from their own. Enacting this partnership between writer and reader has proven to be an ongoing problem in the field of SoTL (Potter and Raffoul 2023; Potter and Wuetherick 2015). However, the case for SoTL's methodological pluralism (McCollum 2023) is intertwined with our shared mission: to advance teaching and learning within post-secondary systems through scholarship.

When reading or reviewing research articles, most academics draw upon their own research paradigm as they assess the value and validity of the work. When the ontological or epistemological perspectives of the reader differ from those of the author, incorrect or unwarranted evaluative

statements can emerge. Authors may address this issue by providing the reader with access to the relevant language and knowledge for a SoTL project's philosophical assumptions. They may also add necessary insights into the design choices and the logic strategies used to obtain the study's findings for the reader's benefit.

We do not claim that our proposed approach of explicit identification of ontological and epistemological lenses will negate all misunderstandings between scholars. Yet, we do observe significant scholarly conflict—particularly in the peer review process—connected to implicit research paradigm bias. As two scholars that have successfully navigated our differences in research paradigms, we ourselves are an example of this. Thus, this paper examines how our disciplinary origins impact the ways we think about validity and rigor in SoTL, and how we have undertaken Boyer's (1987) challenge to continue learning in order to enhance our ability to understand and appreciate SoTL from disciplines far from our own.

OUR DISCIPLINARY PARADIGMS

Here we seek to examine and share how the philosophical paradigms of our academic training have influenced our approaches to SoTL. As readers navigate this section, we invite you to annotate. What aspects of our academic training do you recognize from your own? Which approaches to identifying and validating truth do you see as reasonable within disciplinary or SoTL contexts? Which philosophical traditions do you disagree with, discount, or are even offended by? After reading about the philosophical paradigms of our academic training and how these paradigms might be actioned within a SoTL project, we will encourage you to reflect on your reactions to our ways of thinking.

Brett–I seek to understand the immutable laws of our universe and our classrooms

As a chemist, I was trained in positivist thinking—albeit without explicitly learning about the philosophical underpinnings of the natural sciences. In my chemical research, I value my data as truth whether it was collected using my senses or instrumentation (the latter of which functioned as an extension of my senses). This epistemological approach to research is rooted in positivism: the use of reason and observation to study the natural or social world with the position that all rational assertions can be scientifically verified by observations and can be explained rationally by logic or mathematical proof (Mill 1873). As positivists, scientists are trained to think about data, models, the explanatory power of models, and the predictive power of models.

Comte ([1865] 2015) described the objectives of positivism as twofold: "to generalize our scientific conceptions and to systematize the art of social life" (viii). Park, Konge, and Artino (2020) describe the epistemology of the positivist paradigm as follows: "Positivists contend that knowledge can and must be developed objectively, without the values of the researchers or participants influencing its development. Knowledge, when appropriately developed, is truth—that is, it is certain, congruent with reality, and accurate" (691).

Human feelings do not—or should not—impact the data collected from the natural world or the interpretations that emerge from those data. My prior experiences do not change the mass of a proton or the rate of a chemical reaction. This does not mean that scientists do not feel emotion; rather, human emotions are not a relevant variable within the systems we choose to study.

In contrast to fields that are socially constructed, chemical and nuclear reactions have occurred long before human societies existed, going back all the way to the origins of our universe. As a positivist, I literally seek to discover and understand truths that are even more ancient than the stars.

My positivist training impacts how I approach my SoTL and teaching. I examine the SoTL literature for effective pedagogical models with strong explanatory power. Although positivist research can include qualitative analysis (Park, Konge, and Artino 2020), I initially reserved my trust for quantitative data, similar to many natural scientists. I was trained in the tradition that "scientific knowledge is the paradigm of valid knowledge" (Larrain 1979, 197). Yes, this quote is as declarative as it sounds: scientific knowledge is truth and all else is opinion and feelings. Essentially, the positivist paradigm involves devotion to observable data. It seeks to rise above social and political objectives in order to identify knowledge that predates and persists across all human history.

The concept of "truth" was never explicitly discussed in my training. If a positivist elevates their personal, social, or political values above observable data, they have lost their objectivity. Max Planck (1950) lamented over individuals that once adhered to positivism but, proud in the explanatory power of a choice model, discounted novel data that exposed problems with the predictive power of the model. In some cases, such individuals would literally be denying scientific truths that they could see with their own eyes.

Readers will likely be familiar with the fictitious supercomputer Deep Thought from *The Hitchhiker's Guide to the Galaxy*. Deep Thought answered the ultimate question of life, the universe, and everything with a simple quantitative response: 42 (Adams 1979). As the answer's simplicity demonstrates, numbers don't tell the whole story.

My positivist background has supported me in my SoTL journey. I look deeply at data used to generate models or conclusions. Even when a pedagogical model "feels right," suggesting that it has good explanatory power, I remain skeptical until it has been tested for its predictive power. However, near the beginning of my journey, I identified many questions about teaching and learning that could not be adequately explored from a positivist lens. Some questions were of the "what is happening when. . ." style and others were of the "what is possible when. . ." format (Hutchings 2000). My time in the SoTL community has exposed me to other epistemological perspectives and research traditions. While I have not abandoned my positivist approach, I have come to value the complementary perspectives of different epistemologies and how they can help me better understand the purposes, ways of thinking, and implications of SoTL conducted in other academic disciplines.

Melanie—I seek to understand how people interpret things about themselves

Reflecting on my beliefs about knowledge, I remember asking myself "what do I know and how do I know it?" Nurses are taught to see knowledge as built from various human experiences and viewpoints. While it could be argued that nurses rely on objective facts, these facts may not always encompass a holistic, person/family centered approach that values an individual's subjective experiences and understanding of their health and well-being. When I started my nurse's training, I was in a hospital-based program. The program's focus was to train nurses to work in the hospital setting, and there was very little discussion of research. In fact, one of my nursing instructors mentioned that nurses could do research, but we would need to take further education. I can recall at the time, and this was 30 years ago, that I thought I would never be interested in research.

As I continued my nursing education, I took my first nursing research class, but it was limited in scope and we did not learn about how to situate our research. My first real introduction to research came later, during my graduate studies. It was the first time I learned about epistemologies and ways of knowing. From the perspective of a nurse, we are highly trained to look at patients and their families' context and point-of-view. Therefore, it was natural and easy for me to align with social constructivism; although I did not know that was what it was called at the time. Naturally I chose a qualitative research course, where I was introduced to various types of qualitative methodologies

such as phenomenology, ethnography, and grounded theory. I instantly aligned with phenomenology: research focused on consciousness, judgements, perceptions as well as humans as embodied beings and how they experience life (Connelly 2010). Ball (2009) supports my alignment with phenomenology by noting "nurses often relate to the phenomenological approach because it values the individual's experience and they may feel they already have some of the necessary skills, such as interviewing" (30). As interviewing is such an important skill in qualitative data collection, I knew I had the required skills. Phenomenology and nursing are similar in the fact they both consider the whole person. Nurses also are known for being highly understanding, perceptive, and sympathizing, recognizing the validity of an individual's experiences, and for creating a good rapport with research participants, which are valuable skills to have as a phenomenological researcher. As I learned more about qualitative research and methodologies, I was also briefly introduced to interpretivism. Interpretivism argues that both truth and knowledge are subjective, and it is based on the belief that researchers can never be entirely separate from their values or beliefs. Inevitably, this will impact the way data is collected, interpreted, and analyzed (Ryan 2018).

The same can be said about my epistemological approach to teaching and learning. However, since learning more about epistemological approaches, I have expanded my thinking so that I can look through more than one research lens, depending on what I seek to understand. However, even as I write this article and have had conversations with Brett, my brain automatically defaults to the sensemaking that is typically associated with interpretivism. We know that interpretivism is based on the assumption that reality is subjective, multiple, and socially constructed. More importantly, I, along with fellow interpretivists, believe that we can understand someone's reality through their experience of that reality, which can be different from another person's reality, because these realities are shaped by an individual's historical and social perspective (Elshafie 2013). Using an interpretivist approach to my SoTL research allows me to understand the complexities of teaching and learning from a subjective lens.

My journey in SoTL has been significantly influenced by my interpretivist background. When I engage in dialogues with individuals and groups, I strive to comprehend their unique experiences. Rather than quantifying phenomena within the higher education landscape, I am more inclined towards understanding the "how" and "why" behind these experiences. Throughout my SoTL journey, I have realized that not all inquiries are best suited for an interpretivist or qualitative research approach. Some require a more quantifiable method of exploration. In such instances, I have turned to my SoTL colleagues for guidance and support as I learn alternative methodologies and data collection methods. I am always grateful for the SoTL community's generosity in fostering collective learning and supporting each other in understanding new epistemologies and research perspectives. Their support has been invaluable in broadening my research lens.

What this means for inquiry into teaching and learning (SoTL research)

To understand how our academic training impacts our thinking as SoTL scholars, we independently reflected on the following teaching and learning scenario and prepared a potential response from the philosophical lens of our disciplines. We invite the reader to participate in this exercise by reading the prompt below and then capturing their initial thoughts through five minutes of free writing.

> Prompt: Your university provost has identified a set of courses across the university that need support to increase student success. These courses have consistently had high rates of students achieving D grades, failing, or withdrawing. As a scholar of teaching

and learning, you have been asked to work with the faculty responsible for one of the courses to address the situation. Where do you start?

As a positivist, in the past Brett's first thoughts might have been:

Start by breaking the course structure down into three components: curriculum, pedagogy, and assessment. What metrics already exist that can illuminate bottlenecks in student learning of the curriculum? Does the instructor's pedagogy include a tool that can be used for measuring student attendance or engagement? When looking at class averages on course assessments, what patterns or outliers emerge? Using these data sources, begin to inductively generate hypotheses on the optimal course redesign. Draw upon the instructors, teaching assistants, or students as appropriate to identify incorrect assumptions in these hypotheses prior to next steps.

As an interpretivist, in the past Melanie's first thoughts might have been:

Develop focus groups or conduct individual interviews with students in these courses to see what is happening. Determine the best methodological approach to situate the study. Is this phenomenological? Create an interview guide for the focus groups and one for the individual interviews. As themes emerge within the interviews, break the guide down into subcategories such as: the course content, the teaching approaches, or additional academic support needed for success in the course.

While these initial thoughts do not necessarily reflect the approaches we would take, in this exercise we recognize how our disciplinary training influences the ways we think about teaching and learning. Understanding how our ontological and epistemological lenses influence the ways we approach scholarly inquiry into teaching and learning makes us better scholars. Furthermore, being transparent about our ontological and epistemological lenses within our scholarly writing provides others with the necessary information to fairly evaluate our approaches and findings.

Pause and reflect

Now that you have read about the philosophical paradigms of our academic training and how these paradigms might be actioned within a SoTL project, we encourage you to reflect on your reactions to our ways of thinking. With which approach—positivist or interpretivist—do you more closely align? When you read an article in a SoTL journal, do you approach it with your research paradigm or that of the authors, and is the authors' research paradigm always clear to you? Understanding a SoTL scholar's chosen ontology and epistemology for a particular project is an important part of effectively evaluating if the methodological choices within the project are appropriate.

HOW THIS FRAMES METHODOLOGY

Once we have identified the lens in which we are situating our research, we can start to think about appropriate methodologies to use. A methodology can be described as an overall approach or a strategy for conducting research. A researcher's epistemological lens can provide a foundation for the methodological approach. For example, if a researcher like Brett is framing their research from a positivist lens because he is looking for empirical evidence or scientific methods, then he may want to choose a methodology that includes experimental design, surveys and questionnaires, or statistical analysis. If Melanie is choosing an interpretive lens, on the other hand, she would want a methodology that helps her to understand the research through the interpretation of people's experiences and perspectives. In that case, she would look at qualitative research approaches that use methodologies

such as ethnography, phenomenology, grounded theory, or case studies. Once a researcher chooses their methodology, they can then focus on the method through which they will gather data.

Methodology and methods can sometimes be used synonymously: however, though they are related, they are different concepts in research. Methods are techniques or procedures that researchers use to collect and analyze their data. In SoTL research, we use the "Big Tent" approach, where there are numerous options when choosing your methodology. While traditionally, you are a certain type of researcher and follow a specific discipline's conventions, it does not mean you cannot try a different methodology when conducting a SoTL research project. One way you can decide which approach you want to take is to ask yourself "what is it I want to know?" When developing your research question, we suggest that if you want to take a quantitative approach, "what information will I get from a survey/questionnaire and what is it that a quantitative research question won't reveal?" Similarly, if you are choosing a qualitative approach, you may ask yourself (or others may ask you), "what type of data did you collect, without having quantifiable data?" Many times, we have heard the phrase "it is not real research without numbers."

Research questions

Hutchings (2000) created a taxonomy that assists researchers in framing their question (Table 1). In this framework, she suggests there are four types of questions that may be used to craft a research question.

Table 1. Hutchings' (2000) taxonomy of SoTL questions

"What works?"	These are questions that seek "evidence about the relative effectiveness of different [teaching] approaches."
"What is?"	These are questions that seek to describe, but not evaluate the effectiveness of, different teaching approaches. These are also questions that seek to describe how students learn.
"Visions of the possible"	These are questions related to goals for teaching and learning that have yet to be met or are new to the faculty member asking the questions.
"Theory building"	These are questions designed to build theoretical frameworks for SoTL similar to frameworks used in other disciplines.

Refer to Table 2 for more on how you can craft a SoTL research question, using one of these for types of questions from a qualitative or quantitative methodological approach.

Table 2. Overview of SoTL research inquiry

Taxonomy	Example qualitative question	Example quantitative question
What is?	How do students describe their learning experiences in a flipped classroom environment?	How does the use of technology in the classroom change student participation in a mathematics class relative to specific metrics?
What works?	What are the perceptions of students about the effectiveness of group work in learning?	What is the level of student engagement in a large lecture class?
Visions of the possible	What would be the potential benefits and challenges if we incorporate service-learning into our curriculum?	What would be the impact on student retention if we implemented a peer mentoring program?
Formulating new theoretical frameworks	How might a new framework of active learning change the way we understand student engagement?	How does a new model of blended learning affect student performance in comparison to traditional teaching methods?

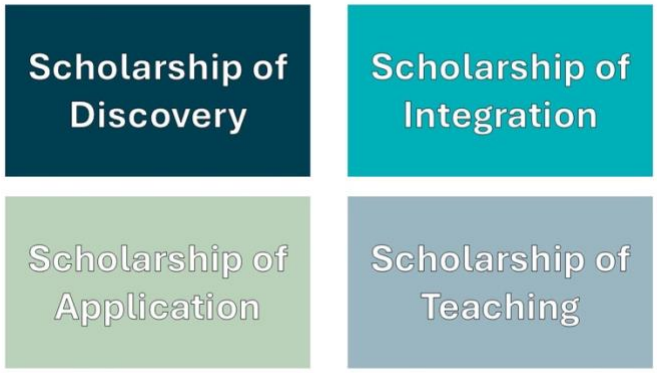
Using one of these four question types can be useful, especially when just starting out; however, there are other ways that you can craft a question. Grant, Fedoruk, and Nowell (2021) suggest that before choosing a question, think about how researchers may reflect both collectively and individually on the intent of the research project before settling on one distinct category of question types. Below are some suggestions of other questions that may be asked to help inform your study:

- What can I make?
- What did I make?
- What just happened?
- What is it useful for?
- What is better?
- What is happening?

SHOULD WE EVEN BE TALKING TO EACH OTHER

The field of SoTL is inherently interdisciplinary and transdisciplinary. In Boyer's (1990) seminal work *Scholarship Reconsidered,* four domains of scholarly activity were identified, as shown in Figure 1. While SoTL has evolved from the scholarship of teaching, it extends into the three other domains: discovery, integration, and application. SoTL scholars seek to discover new knowledge that draws upon and extends findings from other fields. SoTL scholars engage in the integration of knowledge as they weave together strands from diverse fields, such as research on professional identity from nursing and chemistry as applied to settings in higher education. SoTL scholars systematically and systemically investigate the application of established research within educational contexts. Each of these scholarly activities necessitates dialogue between scholars and across disciplines.

Figure 1. Boyer's (1990) Model of Scholarship



Scholarship Reconsidered (Boyer 1990).

Yet, these dialogues are not always collegial (Potter and Raffoul 2023; Potter and Wuetherick 2015). Clearly, there remains work to address SoTL's ongoing inclusivity problem that is rooted in our misunderstandings or unappreciative nature of scholarly traditions that differ from our own. How can we as a scholarly community improve our collective practice of navigating our different philosophical perspectives and scholarly methods in order to value each others' scholarly work and academic "truths"? We propose that the path forward begins with the approach we take to reading and reviewing SoTL manuscripts.

Our SoTL lens impacts the ways we read and review manuscripts

In our multifaceted roles within SoTL, we have engaged in various activities, including authoring, observing, conveying, and receiving feedback from fellow scholars. Our empirical observations reveal that the most significant impediment to effective collegial feedback arises when scholars evaluate the quality of each other's work solely through their own SoTL lens, rather than considering the context in which the scholarship was conducted.

To gain a comprehensive understanding of SoTL manuscripts or presentations, audience members must engage in a deliberate examination that appreciates the philosophical underpinnings of someone else's work. By recognizing the choices, parameters, limitations, and implications inherent in SoTL research, reviewers can provide more constructive responses. Specifically, when a scholar's work aligns with relevant theoretical and methodological approaches (and their conclusions remain within the boundaries defined by these approaches), readers and reviewers alike can enhance their feedback by adopting a similar SoTL lens.

However, a cautionary note is warranted. Critiquing an author's work without considering the ontological and epistemological perspectives that inform the project poses risks not only to the author and reader but also to the broader field. Furthermore, these considerations extend beyond academia, impacting the educational experiences of students.

To better inform readers about the SoTL lens employed in a project, authors should explicitly identify their scholarly lens and provide adequate citations so that the audience can familiarize themselves with the approaches used. While the use of appropriate research methodology has long been accepted as a defining feature of scholarship (Glassick, Huber, and Maefoff 1997) within the field of SoTL, we advocate for a higher standard: the explicit identification of one's ontological and epistemological perspectives and how those lenses inform the selection and use of the research

methodology. This approach has the potential to elevate "Good" SoTL practice to "Great" SoTL practice.

FROM "GOOD SoTL" to "GREAT SoTL" PRACTICE

SoTL scholars have been referencing Felten's (2013) "Principles of Good Practice in SoTL" for over a decade. It is a wonderful starting point as to why we engage in SoTL research. We also know from experience that SoTL sometimes struggles with legitimacy in both rigor and reproducibility, from perspectives of objective truth. Adding one more principle to Felten's work could elevate SoTL to the "next level," therefore making it even better (see Table 3 for a synthesized explanation).

Table 3. Rationale for sixth principle: Adding your research lens

Enhanced rigor	The research lens brings a level of rigor and systematic inquiry to SoTL, enhancing the reliability and validity to the findings.
Improved understanding	It will help in better understanding of the complexities of teaching and learning processes, as it encourages researchers to consider multiple perspectives and to use diverse methods of inquiry.
Increased relevance	The research lens ensures that the SoTL study is grounded in relevant theoretical frameworks, making the findings more meaningful and applicable to other contexts.
Greater transparency	It promotes transparency in the research process, making it easier for others to understand, critique, and build upon the work.
Facilitates scholarly dialogue	The use of the research lens can facilitate scholarly dialogue and collaboration, as it provides a common language and shared standard to conduct and evaluate SoTL work.

More importantly, the addition of the sixth principle could help ensure that SoTL is a scholarly endeavor that requires a thoughtful, systematic approach to inquiry grounded in a deep understanding of both the subject matter and pedagogy (see Table 4 for principes of great SoTL practice). This can also make the findings of SoTL more reliable, the insights more profound, and the impact on teaching more significant.

Table 4. Principles of Great SoTL practice

Principles of Great SoTL Practice
Focused on improving student experiences
Grounded in context
Methodologically appropriate
Conducted in partnership with learners
Appropriately public/disseminated
Identify your research lens

CALL FOR ACTION AND DISCUSSION

In this paper, we underscore the significance of SoTL researchers articulating their ontological and epistemological lenses in their manuscripts. This practice serves a dual purpose: it not only provides transparency and context to the research approach but also elucidates the assumptions and beliefs underpinning the study. This process enhances the rigor and trustworthiness of the research, enabling readers to comprehend the rationale behind the authors' chosen research design, including the methods, results, and conclusions.

Moreover, this practice benefits scholars, particularly those new to the field, by fostering critical thinking about the research they are reading and prompting introspection of their own epistemological assumptions. As the field of SoTL continues to evolve, articulating one's research lens becomes even more crucial. This articulation highlights how different epistemological perspectives can lead to distinct research designs, interpretations, and results, thereby helping to distinguish your work from others in the field.

Call to action

Our call to action is for all those who engage in SoTL, provide support to SoTL scholars, or provide professional development that uses SoTL, to start identifying their lenses when reading, reviewing, or disseminating SoTL scholarship. Our rationale includes the following:

- **Encouraging reflection**: At the inception of any SoTL project, scholars should engage in reflective thinking and curiosity. This can begin with introspection on past experiences within their disciplinary context, or examining their own assumptions, values, and beliefs. If the research is a collaborative effort, the team could discuss how they envision shaping their research approach.
- **Providing education/guidance**: Scholars' familiarity with terms such as "epistemology" and "ontology" may vary depending on their disciplinary background. Faculty, mentors, and others involved in supporting SoTL research can offer educational training on different ontological and epistemological perspectives, emphasizing their significance for research design and interpretation.
- **Modeling:** By explicitly stating their research lens, experienced SoTL researchers can model good practice for newcomers to the field. This can help less experienced researchers understand how to incorporate an epistemological lens into their own work.
- **Promoting critical inquiry:** As we strive to expand the field of SoTL scholarship, it's essential to critically examine the assumptions and beliefs that shape our research. This not only fosters diverse ways of thinking but also encourages alternative approaches to research design.

Discussion

In this section, we delve into the significance of incorporating a research lens in the SoTL. We argue that the explicit identification and application of a research lens can greatly enhance the quality and impact of SoTL research. This discussion is informed by both our call to action and Felten's (2013) "Principles of Good Practice in SoTL." In our recommendations, we also thread the importance of adding your research lens to these principles in order to strengthen the research study.

- **Inquiry into student learning:** This principle aligns with the call for encouraging reflection. By focusing on student learning, scholars are encouraged to reflect on their teaching practices and student outcomes. This reflection can be enhanced by identifying and applying a specific research lens.
- **Grounded in context:** This principle resonates with the need for "providing education/guidance." Understanding the context in which teaching and learning occur is crucial, and education about different research lenses can deepen this understanding.
- **Methodologically sound:** This principle ties in with promoting critical inquiry. A methodologically sound study requires a critical examination of the assumptions and beliefs that may shape the research. The explicit use of a research lens can guide this critical inquiry, leading to more robust and reliable findings.
- **Conducted in partnership with learners:** This principle can be enhanced by the practice of modeling. Experienced SoTL researchers who explicitly state their research lens can model good practices for students (learners), who are often partners in SoTL research. This can help learners understand how to incorporate a research lens into their own work.
- **Appropriately public:** Making SoTL research public allows for the dissemination of the research lens used, which can contribute to broader scholarly conversations about teaching and learning.
- **[NEW] Enhancing scholarly rigor:** The use of a research lens can significantly enhance the scholarly rigor of SoTL research. By clearly articulating the ontological and epistemological foundations of their research, scholars provide a robust theoretical framework for their study. This not only strengthens the validity and reliability of the research findings but also enhances the credibility and transferability of the study.

In a scholarly paper, this might look like the following:

> In this study, we adopt a constructivist lens, viewing learning as a process of constructing knowledge based on individual experiences and ideas. Our epistemological stance is interpretivist, as we seek to understand the subjective experiences of our students in the learning process. This lens shapes our research design, as we employ qualitative methods to capture the richness and complexity of student learning experiences. Our findings should be interpreted within this theoretical framework, recognizing that they represent one of many possible interpretations of the phenomenon under study.

Adding a research lens to SoTL not only aligns with Felten's (2013) "Principles of Good Practice in SoTL," but also enhances them. It encourages reflection, provides guidance, models good practice, promotes critical inquiry, and contributes to the public scholarship of teaching and learning. Ultimately, this integration strengthens the field of SoTL, making it a more rigorous, inclusive, and impactful discipline.

CONCLUSION

Felten's five principles of good practice in SoTL have served as a valuable framework over the past decade. Our recommendation to supplement this succinct set with one additional signature practice is informed by our observations as scholars, editors/reviewers, and learners. It has been undertaken in consultation with SoTL scholars working within contexts near and far from our own. We

particularly express appreciation to attendees of ISSOTL23 in the Netherlands who provided feedback on our recommendation for a sixth principle of SoTL practice that can transform our efforts from "good" to "great."

As authors adopt the practice of making their ontological and epistemological assumptions overt, they demonstrate their commitment to the field of SoTL as a methodologically pluralistic research community. This practice will increase the accessibility, help SoTL findings reach broader audiences, and encourage greater reflexivity in the design of our SoTL studies. We invite all scholars of teaching and learning (and academic journals of the same) to adopt this practice within our scholarly processes, from study design through dissemination activities. By revealing the "hidden design" of our SoTL, we can overcome any misunderstandings rooted in philosophical assumptions, increase cross-disciplinary understanding of our scholarship, and reduce barriers for those who are engaging in SoTL research.

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REFERENCES

Adams, Douglas. 1979. *The Hitchhiker's Guide to the Galaxy*. London: Pan Books.

Ball, Paula. 2009. "Phenomenology in Nursing Research: Methodology, Interviewing and Transcribing." *Nursing Times* 105 (32): 30–33.

Bhaskar, Roy. (1975) 2013. *A Realist Theory of Science*. London: Routledge.

Boyer, Ernest L. 1987. *The Undergraduate Experience*. New York: Harper and Row.

Boyer, Ernest L. 1990. *Scholarship Reconsidered: Priorities of the Professoriate.* NJ: Carnegie Foundation for the Advancement of Teaching.

Bryman, Alan. 2016. *Social Research Methods*. Oxford: Oxford University Press.

Comte, Auguste. (1865) 2015. *A General View of Positivism*. Translated by J. H. Bridges. https://doi.org/10.4324/9781315645780.

Connelly, Lynn M. 2010. "What is Phenomenology?" *MedSurg Nursing* 19 (2).

Elshafie, Marwa Mohamed. 2013. "Research Paradigms: The Novice Researcher's Nightmare." *Arab World English Journal.* 4 (2): 4-13. https://awej.org/research-paradigms-the-novice-researchers-nightmare/

Felten, Peter. 2013. "Principles of Good Practice in SoTL." *Teaching & Learning Inquiry* 1 (1): 121–25. https://doi.org/10.2979/teachlearninqu.1.1.121.

Glassick, Charles. E., Mary T. Huber, and Gene I. Maefoff. 1997. *Scholarship Assessed: Evaluation of the Professoriate*. San Francisco: Jossey Bass.

Grant, Kimberley, Lisa Fedoruk, and Lorelli Nowell. "Conversations and reflections on authentic assessment." *Imagining SoTL* 1 (2021): 146-162. https://doi.org/10.29173/isotl532

Haigh, Neil, and Andrew John Withell. 2020. "The Place of Research Paradigms in SoTL Practice: An Inquiry." *Teaching & Learning Inquiry* 8 (2): 17–31. http://dx.doi.org/10.20343/teachlearninqu.8.2.3.

Hubball, Harry, and Anthony Clarke. 2010. "Diverse Methodological Approaches and Considerations for SoTL in Higher Education." *Canadian Journal for the Scholarship of Teaching and Learning* 1 (1): 2. http://dx.doi.org/10.5206/cjsotl-rcacea.2010.1.2.

Hutchings, Pat. 2000. *Opening Lines: Approaches to the Scholarship of Teaching and Learning*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching.

Larrain, Jorge. 1979. *The Concept of Ideology*. London: Hutchinson.

McCollum, Brett M. 2023. "Making the Case for SoTL's Methodological Pluralism: An Introduction to Issue 14.2." *The Canadian Journal for the Scholarship of Teaching and Learning* 14 (2). https://doi.org/10.5206/cjsotlrcacea.2023.2.17115.

Mill, John S. 1873. *Auguste Comte and Positivism*. Philadelphia: J.B. Lippincott & Co.

Park, Yoon Soo, Lars Konge, and Anthony R. Artino. 2020. "The Positivism Paradigm of Research." *Academic Medicine: Journal of the Association of American Medical Colleges* 95 (5). https://doi.org/10.1097/ACM.0000000000003093.

Planck, Max K. 1950. *Scientific Autobiography and Other Papers*. New York: Philosophical Library.

Potter, Michael K., and Raffoul, Jessica. 2023. "Engaged Alienation: SoTL, Inclusivity, and the Problem of Integrity." *International Journal for the Scholarship of Teaching and Learning* 17 (1). https://doi.org/10.20429/ijsotl.2023.17102.

Potter, Michael K., and Brad Wuetherick. 2015. "Who is Represented in the Teaching Commons? SoTL Through the Lenses of the Arts and Humanities." *The Canadian Journal for the Scholarship of Teaching and Learning* 6 (2). https://doi.org/10.5206/cjsotl-rcacea.2015.2.2.

Ryan, Gemma. 2018. "Introduction to Positivism, Interpretivism, and Critical Theory" *Nurse Researcher* 25 (4). https://doi.org/10.7748/nr.2018.e1466.

Webb, Andrea S. 2019. "Navigating the Lows to Gain New Heights: Constraints to SOTL Engagement." *The Canadian Journal for the Scholarship of Teaching and Learning* 10 (2). https://doi.org/10.5206/cjsotl-rcacea.2019.2.8173.