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Keeping the Scholarship in the Scholarship of Teaching and Learning

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Abstract

As the Scholarship of Teaching and Learning (SoTL) increases in recognition for its contributions to teaching and learning in higher education, it also becomes increasingly important that those wishing to make contributions, and whose area of expertise falls outside of the field of education, make themselves aware of how to conduct educational research. In this essay I question what scholarship means in SoTL and provide a discussion about what is considered to be a scholarly contribution within the educational research community.

Keywords

Educational research, Scholarship, SoTL

Keeping the Scholarship in the Scholarship of Teaching and Learning

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Abstract

As the Scholarship of Teaching and Learning (SoTL) increases in recognition for its contributions to teaching and learning in higher education, it also becomes increasingly important that those wishing to make contributions, and whose area of expertise falls outside of the field of education, make themselves aware of how to conduct educational research. In this essay I question what scholarship means in SoTL and provide a discussion about what is considered to be a scholarly contribution within the educational research community.

Keywords: Educational research; scholarship; SoTL

Introduction

Over the past decade there has been a rise of scholarly activities related to the Scholarship of Teaching and Learning (SoTL)—evidence that SoTL is achieving recognition within the research community (Kreber & Kanuka, 2007). For most of us whose area of expertise and research is in teaching and learning in higher education, the emergence of SoTL was, and is, viewed as an interesting extension of educational research. In particular, and in agreement with Huber and Hutchings (2005; see also Shulman, 2000), when research is conducted on teaching and learning by academics within their own disciplines, the findings have the potential to provide significant contributions to the body of knowledge in higher education. Moreover, when the findings are made public they can be used to improve practice, as well as build on this work for future research.

While there exists different conceptions of SoTL, most would likely agree that the practice of SoTL is that of teachers seeking evidence for what works and then making these findings more widely available through various forms of dissemination (Charbonneau, 2005; Huber & Hutchings, 2000). Shulman's (2000) definition of SoTL has been widely quoted:

We develop a scholarship of teaching when our work as teachers becomes public, peer-reviewed and critiqued. And exchanged with members of our professional communities so they, in turn, can build on our work. These are the qualities of all scholarship. (p. 50)

Questioning Scholarship

In this essay, I question whether Shulman's (2000) statement of the qualities of scholarship are, in fact, qualities of scholarship—or more precisely, enough to be considered as scholarly works in the educational research community. Is making our work 'public, peer-review and critiqued' sufficient to be considered as 'scholarship' in teaching and learning?

Or is 'public, peer-review and critiqued' those characteristics that comprise a scholarly 'educational publication'? Of course, debates such as this, and other aspects, of SoTL are not new. For example, debates have revolved around the differences between 'excellence in teaching', 'scholarly teaching' and the 'scholarship of teaching and learning' (e.g., Kreber, 2002; Richlin, 2001) resulting in contested distinctions. I assert a similar reexamination is needed about what 'scholarship' actually means when we use the phrase 'the scholarship of teaching and learning'—from an *educational* research perspective. If SoTL is to secure credibility in the educational research community, this is an important issue for those engaged in SoTL. Many education academics are concerned that SoTL is eroding the scholarship in their field of study. This perception has existed since the inception of the SoTL but became most public when Graham Gibbs from Oxford University made a strong statement about the lack of theory and awareness of previous work in many of the papers presented at the International Society for the Scholarship of Teaching and Learning (ISSoTL) conference (see: <http://issotl10.indiana.edu/plenary.html>).

Gibbs' assertion about the lack of theory and awareness of previous work at ISSoTL is not the only one to levy such criticisms. The Research Assessment Exercise in the UK has made similar observations (see, for example, RAE at <http://www.rae.ac.uk/pubs/2009/ov/> - section K, UOA 45). While this may, rightly, be a valid criticism, the solution to this problem is not straightforward—in particular, the peer review process for SoTL can be tricky. The problem is as follows. SoTL is deeply embedded within the disciplines (Healey, 2000; Huber & Morreale, 2002). These scholarly works are conducted by academics pursuing pedagogical inquiry specific to a discipline—and not in just any discipline, but their own discipline. Within each discipline are decidedly distinct differences in ways of knowing, thinking and approaches to learning (see for example Donald, 2002). It is these very differences between the disciplines that uniquely informs and contributes to SoTL. Further, it is these diverse approaches that make the significant contributions, and add to our understandings of how students learn and develop in different fields of study and disciplines (Huber & Hutchings, 2005). Given that the greatest value of SoTL is the contributions researchers make to teaching and learning that is deeply embedded in the disciplines, the research will, of necessity, be conducted by researchers whose expertise lies in the discipline studied; not in educational research. However, and this is the tricky part, when research within the field of education is written and reviewed by academics whose expertise is not within the field of education many, indeed most, are unaware of the prior related and relevant research conducted, research traditions in education, as well as important learning theories upon which the research needs to build on if the findings are to make significant contributions to the field of education. The result is the aforementioned growing concern about the erosion of the credibility by educators whose expertise is in the field of teaching and learning in higher education.

Adding to this problem, the meaning of scholarship by those concerned with SoTL remains ambiguous. Huber and Hutchings (2005), for example, in the latest Carnegie Report on SoTL espouse what they refer to as 'a big tent' view of SoTL. That is, while planned, systematic and rigorous pedagogical research within the disciplines is one way of engaging in SoTL, it is argued further under the 'big tent view', modest and small-scale activities aimed at reflective classroom teaching, followed by sharing what was learned, also needs to be recognized as valid ways of engaging with this kind of work.

The important question is this: Notwithstanding such small-scale efforts may make contributions to one's practices—but when they are made public, is this enough to be considered a scholarly contribution? Does scholarship include anecdotal experience? Personal opinion? Reflective descriptions? I suspect most academics, regardless of discipline, would agree that scholarship involves a deliberative process that makes a

significant contribution to knowledge within a discipline. Similar to other disciplines, scholarship in the field of education also includes original research inclusive of building on prior research, using a methodology falling within the traditions of education (see, for example, Creswell 2005), and framed within a learning theory (exclusive perhaps of grounded theory research and phenomenography). If SoTL is to secure its place as a credible field of study within the academy, and within the field of education, perhaps it is time to revisit the meaning of 'scholarship' in the Scholarship of Teaching and Learning.

As mentioned earlier, wrestling with the idea of 'scholarship' is not new in SoTL. A decade ago, Richlin (2001) questioned whether there was a difference between scholarly teaching and the scholarship of teaching and Kreber (2001) asked whether all academics should be expected to engage in this kind of work and if so, how such work could possibly be assessed. In response to how this kind of work could, or should, be assessed, the Carnegie Foundation proposed that a new set of standards was needed for evaluating faculty performance (see Glassick, Huber & Maeroff, 1997) arguing for various forms of scholarship (teaching, research, integration and application). To be equally recognized they all "must be held to the same standards of scholarly performance" (p. 22). They proposed six standards be imposed: (1) the work have clear goals, (2) require adequate preparation, (3) make use of appropriate methods, (4) produce significant results, (5) demonstrate effective presentation, and (6) involve reflective critique. Alternatively, Kreber and Cranton (2000) argued that the traditional criteria by which to assess scholarly work, namely that it require a high level of discipline-related expertise, be innovative, could be replicated, elaborated, documented, peer-reviewed, and finally, be of significance. These kinds of discussions revolving around assessing what scholarship is, and how it should be assessed, are important. However, such discussions have bypassed the question of what is considered to be scholarly contributions *within the educational research community*.

Again, issues related to determining what scholarship is, in addition to the assessing the credibility of scholarly contributions in the field of education is also not new. In 1974, Suppes wrote a landmark article slamming the state of research in education, declaring, "education pays more lip service to research than do other main segments of the society" (p. 3). More than three decades later, we continue to experience these criticisms in education. Most recently, for example, The Research Assessment Exercise (RAE) in the UK noted problems in education research arising from contributions by individuals who come from an academic career outside the discipline of education:

[We] think that it might be advisable in any future exercise to make an even clearer distinction between pedagogical research in higher education and descriptive or anecdotal accounts of teaching developments and evaluations ... [while] they were often very interesting and worthwhile in their own right (and would probably have a strong appeal for practitioner readers), but did not meet the definition of research for the RAE or made only a limited contribution to their area (see <http://www.rae.ac.uk/pubs/2009/ov/> - section K, UOA 45).

Within the field of education there are, typically, three lenses through which we examine our practice: (1) scientific and positivistic methodologies, (2) naturalistic and interpretive methodologies; and (3) methodologies from critical theory (Cohen, Manion & Morrison, 2005). Working within these lenses, as well as from a reviewer's perspective for IJSOTL for several years, following is an overview of frequent problems I have seen alongside the increasing number of manuscripts falling under the category of SoTL.

The following sections are intended for academics whose area of research falls outside education, but are conducting research on teaching and learning within their own disciplines.

The Importance of a Theoretical Framework

In addition to the prior criticism noted by Suppes (1974), he argues that educational research has not made any serious movement toward theory development. Rather, most educational research is directed at the more “mundane and empirical matters of collecting statistics and facts and of disseminating information” (p. 4).

A powerful theory can change our view on what is important and what is not. More specifically, compelling theory illustrates that what appears to be a simple matter of empirical investigation is, in fact, complex and subtle. The merit of a good theory is that it pushes for a meaningful understanding of how our learners learn. This requires a search beyond facts and statistics. It requires explanatory power, which compels us to recognize the complexity of how our students learn. A good theory provides us with this.

There are many excellent learning theories relevant to higher education; unfortunately, few of them are used to frame SoTL research projects. Rather, academics outside the field of higher education have aggregated toward the use of one conceptual framework: deep and surface learning (Marton & Säljö, 1976; Marton & Säljö, 1984)—initially describing the distinction which Martin and Säljö found among students reading an academic article as deep and surface levels of processing, and later amended to approaches to learning. And while Martin and Säljö’s research are both noteworthy and a significant piece of research, like all research it does have its limitations. Perhaps even more troublesome is that the findings of this research are often reduced to a dichotomist explanation with a one-dimensional antidote: change how we evaluate our students. While not disregarding the significant insights gained from Martin and Säljö’s research about how students approach their learning, it falls under what Suppes (1974) refers to as ‘bare empiricism’. Similar to other disciplines in both the social and natural sciences, much of the educational research is conducted in this manner. Suppes argued that at its most extreme level, bare empiricism:

... is simply the recording of individual facts, and with no apparatus of generalization to theory, these bare facts duly recorded lead nowhere. They do not provide even a practical guide for future experience or policy. They do not provide methods of prediction or analysis. In short, bare empiricism does not generalize. The same triviality may be claimed for the bare intuition of the romantics. Either bare empiricism or bare intuition leads not only to triviality, but also to chaos in practice if each teacher is left only to his or her own observations and intuitions. Reliance on bare empiricism or bare intuition in educational practice is a mental form of streaking, and nudity of mind is not as appealing as nudity of body. (p. 4)

To be clear, this is not to say that evidence-based research is misplaced in higher education. Indeed, evidence is required; but without a theory that offers ‘complex’ explanations, the evidence presented remains unclear. In agreement with Maton (2006), educational research attracts many academics inspired to facilitate meaningful educational experiences for their students. This is a laudable aspiration. However, good intentions can easily digress into troubles as attempts are made to make changes without knowing what is possible to change, how to change it, and with what effects for whom. Good intentions and laudable aspirations are not enough. As education researchers, we need a reliable and valid theory that provides explanatory power for the complexities of learning upon which we can base

our desired changes.

The issue of theory must be broached because it is often regarded by academics outside of education as nothing more than an imposed intellectualism that is unrelated to reality and disconnected with practice (Maton, 2006). Such views make no sense. It is human nature to theorize about everything in our world—theorizing is how we make meaning out of the complexities in our everyday lives. Likewise, there is no discipline or field of study that does not have theory—including education. Without theory there is no data. Maton explains the importance of this further by quoting Karl Popper (regarded as one of the greatest philosophers in the 20th century) who argued that the belief that we can start with pure observations alone, without anything in the nature of a theory, is absurd. Observation is always selective. The important point is not whether to use a theory in educational research but what theory will be used. And as importantly, how explicit the theory is, is directly related to what it is capable of doing. Hence, the use of theory makes public the intellectual basis of our findings.

But not all theories have the same explanatory power. More problematic is that the choices we make about using theoretical frameworks are often made based on socialization resulting in an unfounded allegiance to a theoretical approach rather than an informed decision about what theoretical framework is most effective at explaining the research problem under investigation. Selecting a poor and/or inappropriate theory will not provide a significant contribution to improve teaching and learning in higher education. For example, much of the literature falling within SoTL has tended to adopt students' approaches to learning as deep or surface when, in fact, important insights can be gained about our students' learning by investigating their learning strategies. Learning strategies can be defined as behaviours and thoughts that a student engages in during learning (Weinstein & Mayer, 1986). A wide variety of methods for categorizing learning strategies are offered in the literature. In general, learning strategies can be collapsed into three broad categories: cognitive strategies, metacognitive strategies, and affective strategies, and can be summarized in the following way:

- Cognitive strategies assist learners' cognitive processes to construct knowledge. Within this category are four strategies that learners use: (1) selection and (2) rehearsal strategies which are usually regarded as rote learning strategies because students memorize information by simple repetition or reproduction; (3) elaboration and (4) organizational strategies which are regarded as deep approaches. Because understanding can enhance the ability to remember learning materials, elaboration and organizational strategies that enhance understanding are important for both deep and higher ordered learning (Olgren, 1998).
- Metacognitive strategies are directed at regulating the cognitive and affective strategies. Research has shown that metacognitive strategies lead to improvements in academic performance. Biggs' (1988) research has suggested that increasing metacognitive awareness leads to better performance outcomes. Everson and Tobias (1998) showed the positive relationship between high metacognitive abilities and course grades. Kurtz and Weinert (1989) demonstrated that metacognition is a better predictor of performance than either scores on traditional intelligence tests or effort attributions.
- Affective strategies are concerned with the emotional status including motivation, anxiety and fears of failure towards learning. Studies have shown that an absence of anxiety and intrinsic motivation contribute to deep processing (Entwistle & Waterston, 1988; Fransson, 1977). Taylor, Morgan and Gibbs (1981) differentiated

between intrinsic and extrinsic motivation in their investigation of students' learning orientations. The findings of Taylor et al. are consistent with the above researchers, who concluded that students with intrinsic motivation were more likely to adopt deep approaches to study and had more meaningful learning.

Seldom do I these learning strategies used as a framework for furthering our understandings of how our students strategize about their learning approaches by those engaged in SoTL.

With respect to use of learning theory, there is debate in the educational literature about what a theory is and what it is not—and whether or not approaches to learning and learning strategies are in fact theories. This debate is beyond the scope of this paper. There are, however, notable theories of learning in education, and specifically within the field of higher education, providing explanations of how students develop as learners. These theories are referred to as developmental learning theories. Understanding how our students' learning develops has been the subject of research by psychologists over the whole of the twentieth century (Biggs, 1999). Researchers such as Jean Piaget and Erik Erikson have presented seminal theories of cognitive development that span the cradle to the grave.

Within the higher education sector, perhaps Perry (1970; 1981) and Baxter Magolda (1992; 1999) have been most influential in terms of undergraduate student developmental learning theories. The Perry scheme emerged from exhaustive qualitative analyses of the ways in which students described their experiences and transformations over their college years (Perry, 1970; 1981). What Perry found was that students progress from a world of absolutes and truth into a world of contexts and commitments in which one must take stands and make identity choices to find meaning in one's life. More specifically, Perry's research revealed the cognitive and affective perspectives at the heart of tertiary education, involving a movement toward more complex forms of thought about the world, one's discipline/area of study and one's self. His scheme emerged from the notion that the most powerful learning, the learning most institutions of higher education really want to see students achieve as a result of their experiences with classes/curricula, involves significant qualitative changes in the way learners approach their learning and their subject matter. Similar in many ways to Perry's scheme, is Baxter Magolda's Model of Epistemological Reflection (1992). There are four stages in Baxter Magolda's Model for Epistemological Reflection: absolute knowing, transitional knowing, independent knowing and contextual knowing.

These developmental learning theories are examples of theories that have been developed over many years, resulting in providing clear implications with respect to understanding effective teaching practices irrespective of discipline. Moreover, such theories provide valuable insights upon which further research could, and should, build upon. Perry's and Baxter Magolda's theories are only two examples of developmental learning theories within the higher education sectors. An extensive overview of learning theories can be found at http://www.emtech.net/learning_theories.htm.

Methodologies and Research Methods

Like other fields of study and disciplines, education has research traditions and a culture revolving around ways of knowing, knowledge building and knowledge construction. For obvious reasons, education research methods are usually classified by the degree of direct applicability of the research to educational practice or settings: basic research, applied research, evaluation research, or research and development (Gay, Mills & Airasian, 2006).

Briefly, *basic research* is research conducted solely for the purpose of developing or refining a theory. Theory development is a conceptual process that requires many research studies conducted over time and not, unusually, decades. *Applied research*, is concerned with determining the effectiveness of a theory in solving practical, everyday educational problems. *Evaluation research* investigates such things as quality and/or effectiveness of a course, program, product, or practice. *Research and development* (R&D) investigates user needs followed by product development (typically, but not always, the 'user' is the student). The purpose of R&D efforts is not to formulate or test theory but to develop educational materials.

Unlike other forms of research that seek new knowledge or understanding, evaluation and R&D research focuses mainly on making decisions and products about programs and practices. Within the educational research community, evaluation and R&D investigations are not (typically) considered to be scholarly works worthy of publication in scholarly journals. Knowing the differences between the kinds of research conducted in education is an important point to note as academics outside of education engage in SoTL. Specifically, course and program evaluation, as well as course design and development—typically evaluated using teaching evaluation forms and/or follow-up student interviews and/or focus groups—are seldom considered to be worthy of publication in scholarly journals in education.

Build on the Literature

The Research Assessment Exercise (RAE) in the UK also made the following observations about research conducted in higher education (see: <http://www.rae.ac.uk/pubs/2009/ov/>)

... user audiences tend to be impressed by work that consciously builds on what has been done before – the systematic review and research synthesis being prime examples of cumulative work (though we recognise the limitations of these too). We were therefore concerned when, as sometimes happened, we read papers that made insufficient reference to recent and relevant studies in the same field, and that therefore missed important opportunities for helping to create coherent bodies of knowledge. This is done not only by building on and adding to, but also by replicating and challenging, or by offering alternative explanations of, existing data – and this we would welcome more of.

All significant research contributions contextualize findings in the literature (Gay, et al., 2006). Searching for related literature not only provides support for the research but shares with the readers what is already known about the problem being investigated, while also acknowledging the contributions already made. Adding to knowledge means that researchers make a contribution to the existing corpus of information (Creswell, 2005). Most importantly, however, a thorough review of the literature helps researchers by informing their thinking about the issues and questions that arise in their practice (Gall, Gall & Borg, 2005).

Teacher as Researcher: Anecdotal, Biased, Unethical

Referring back again to Suppes' (1974) seminal article, he asserts that "since at least the eleventh century, when Anselm tried to use an argument by analogy to prove the existence of God, there is proper skepticism that an argument by analogy carries much weight" (p. 3). Likewise, the REA made a similar observation many centuries later:

[G]iven that many researchers in education come to research from a teaching career or an academic career outside the discipline of education, we think that it might be advisable in any future exercise to make an even clearer distinction between pedagogical research in higher education and descriptive or anecdotal accounts of teaching developments and evaluations (see: <http://www.rae.ac.uk/pubs/2009/ov/>)

It is a breadth of fresh air to read how academics are exploring new ways of teaching and learning in their classroom. Anecdotal experiences, however, are not scholarly research. On this point, Cohen, et al. (2005) point out that the limitations of presenting a personal experience (typically guised as an investigation of an innovative method used in throughout a course), is easily exposed when compared with features of a scientific approach to investigating a problem:

Consider, for example, the striking differences in the way in which theories are used. Laypeople base them on haphazard events and use them in a loose and uncritical manner. When they are required to test them, they do so in a selective fashion, often choosing only that evidence that is consistent with their hunches and ignoring that which is counter to them. Scientists, by contrast, construct their theories carefully and systematically. ... when tested [or explored] their explanations have a firm basis in fact ... their concept of *control* distinguishes the layperson's and the scientist's attitude to experience. Finally, there is the difference of attitude to the relationships among phenomena. Laypeople's concerns with such relationships are loose, unsystematic and uncontrolled. (Cohen, et al., pp. 3-4)

Finally, as with any discipline, those using the findings of the research "have a right to expect the research be conducted rigorously, scrupulously and in an ethically defensible manner" (Cohen et al., 2005, p. 47). To some extent, ethical research is both discipline and culturally based. However, all researchers do need to provide some information about the ethical treatment of the research participants—especially when the study involves an educational intervention whereby the researcher is the instructor and the participants are her/his students. For example, given the position of authority of the instructor over the students in credentialed learning environments, without information on how the participants were asked to participate in the study it is difficult for consumers of educational research to understand whether the students were free to participate (or not) and, as importantly, whether they were able to be honest about the effects on their learning. Without this information it is not clear if the data collected were done so in an ethical manner and/or if the data collected are unbiased, leaving consumers of the research with residual questions about the credibility of the findings. Ethics in education need attending to, with a brief explanation in published works.

Generalizability, Transferability and Limitations

At the 2010 conference for the International Society for the Scholarship of Teaching and Learning, Graham Gibbs also made the following observations:

... [M]uch pedagogic research seeks to establish general truths about teaching and learning that apply to all students, to all teachers, to all disciplines and to all institutions of higher education. Empirical pedagogic research that is largely atheoretical often assumes that a finding in one context will also be found in another context. The unspoken belief is that "*this finding in my study also applies to you*" or

that *"as this method was found to work better, you ought to use this method"*. Theoretically based pedagogic research often assumes that the phenomenon being theorised about will be evident in all pedagogic contexts, with the unspoken belief that *"this phenomenon is also prominent in your teaching"*, and that the explanations being propounded about these phenomena will be similarly useful in understanding all contexts. I will argue that these assumptions are not sound. Many context variables are so influential that extrapolation from one context to another is fraught with difficulties and leads to many errors and confusions, including the adoption of contextually inappropriate educational practices, wrong-headed explanations of local pedagogic phenomena, the alienation of teachers who know more about the crucial features of their context than do the pedagogic researchers, and a retreat into methodological obscurantism on the part of researchers, in an attempt to explain apparently inconsistent findings which are more likely due to unnoticed contextual variables. (<http://issotl10.indiana.edu/plenary.html>)

In agreement with Graham Gibbs' assertion, those engaged with SoTL need to contextualize their findings and acknowledge the limitations, especially with respect to generalizability and/or transferability. Not much more needs to be said on this topic.

Closing Précis

As a researcher whose area of research and expertise is in teaching and learning, with an education background comprised of a number of related degrees, when the idea of the 'scholarship of teaching and learning' emerged, I confess, I found it baffling. For academics, such as myself, the very notion felt somewhat offensive in that there is little, if any, acknowledgement that this field of study has existed for more than a century. Moreover, it seems somewhat odd that simply by virtue of teaching in the higher education sector makes one a credible researcher in this field.

On the other hand, for those of us who have spent our academic careers working in teaching development centres in institutions of higher education, we are also keenly aware that there are disciplinary differences, with very distinct ways of knowing. These disciplinary differences need to be researched by those whose expertise is in the disciplines—for all the reasons that resulted in the creation of SoTL. While I cannot speak on behalf of my colleagues, I can say that I have come to value the contributions made by SoTL and believe it enhances the field of study in higher education—that is, in the area of teaching and learning within and across the disciplines. This being said, I continue to be troubled about the quality of scholarship. I write this essay with the hopes that academics engaged in SoTL whose expertise falls outside the field of higher education will take the time to learn about education research traditions, the extensive corpus of literature in teaching and learning in higher education that exists—not the least of which are theories of learning—and conduct SoTL in an informed manner, ensuring the scholarship stays in the scholarship of teaching and learning.

In closing, I share the following quote from Gall, et al. (2005).
If you wish to be a fully informed member of the education profession, you will need to learn about the knowledge generated by researchers. You also will need to develop an understanding of their methods of inquiry and of the problems and practices that they are currently investigating. You would expect no less of a doctor, an engineer, a therapist, an airline pilot, or any other professional on whom you depend. (p. 3)

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