# Opening the Door to SoTL:
# Teaching Evaluations as Part of the Inquiry Cycle

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**Abstract:**

*In this article three experienced academics draw links between the evaluation of teaching conducted at most postsecondary institutions and the development of inquiries in the scholarship of teaching and learning (SoTL). Against the background of institutional change, the authors saw convergence between their individual work in SoTL and their joint work as members of a committee analyzing the literature of the assessment of teaching for purposes of promotion and tenure. As the literature provided few formal methods for bringing the activities together we decided to conduct some research of our own. In this paper, we suggest a model for using teaching evaluation to spark SoTL inquiry, describe the small research project we undertook, and provide three examples of how teaching evaluations can provide a way to begin SoTL inquiry.*

## *Key Words:*

collaboration, scholarship of teaching and learning, evaluation of teaching.

## Introduction

Since Ernest Boyer argued for a scholarship of teaching in *Scholarship Reconsidered: The Priorities of the Professoriate* (1990), there has been increasing interest in both scholarly teaching and the scholarship of teaching and learning (SoTL), and a certain amount of confusion about the two terms. Here we follow Kathleen McKinney (n.d.) and define SoTL as the "systematic reflection on teaching and learning made public." M. K. Potter and E. Kustra (2011) argue that SoTL and scholarly teaching are two distinct concepts. Although some critics posit developmental models from

scholarly teaching to SoTL and then improved learning, or from SoTL to reinvigorated scholarly teaching to improved learning, Potter and Kustra (2011) argue for a "model that posits scholarly teaching and SoTL as separate but overlapping magesteria, distinct worlds that may relate to each other in multiple ways, worlds that may have multiple entry points." While many faculty are interested in trying to improve student learning through data-driven reflection, many are hesitant to take on a new research area. One way into SoTL is to consider information about the teaching/learning cycle that is already being collected, including the institutionally-mandated evaluations of teaching. We recognize that the evaluation of teaching is not the same as the evaluation of learning, but argue the data generated can be used as part of an inquiry cycle into learning. In this paper we suggest a model for using teaching evaluation to spark SoTL inquiry, describe a small research project, and provide three examples of how teaching evaluations can provide a way to begin SoTL inquiry.

## Background

　　We come from an institution in transition from a teaching-focused college to an undergraduate university still focused on teaching but with scholarship expectations for many faculty. This change has prompted discussions of how we assess faculty work for the purposes of tenure and promotion. As a college, Mount Royal based its tenure decisions almost exclusively on teaching and had developed systems to provide multiple sources of information about faculty members' teaching, including peer observations of classroom instruction written up in formal documents. Tenure-track faculty were observed annually by their department chair, by a tenured faculty member from their department, and by a tenured faculty member from a different department. In addition, tenure-track faculty needed to have two formal student evaluations of instruction per semester. Once a faculty member had achieved tenure, he or she had two student evaluations per academic year. As a form of post-tenure review, faculty were encouraged to take part in peer collaboration groups, many of which involve further less formal peer observations of teaching.

　　As Mount Royal became a university, all the processes related to faculty appointment, tenure, and promotion were subject to review. The Academic Development Centre convened a group of experienced instructors from across the institution to analyse existing research about teaching evaluations. The Advisory Resource Group on Evaluating Teaching (TARGET) was charged with examining practices and challenges around the evaluation of teaching. We were members of TARGET, and regularly perform peer evaluations of faculty in our own and other departments. TARGET's purpose was to build a core of expertise around the evaluation of teaching, largely by reviewing and discussing the literature in the light of experience at Mount Royal University, and providing the results of our deliberations back to the community to inform the development of Faculty-level criteria and standards for evaluating teaching. The group completed its work over two years with the results being presented at professional development sessions and on a website accessible to the larger community (http://www2.mtroyal.ca/~mmacmillan/target1.htm).

　　While Mount Royal University (MRU) remained committed to teaching, there was growing interest in scholarship, especially in the scholarship of teaching and learning. It

seemed a particularly good fit for MRU, which sees itself as a leader in teaching, to move in to SoTL as an area of inquiry. Coincident with our work on TARGET, we all became involved with different SoTL inquiries. We noticed that the questions being asked in various evaluations of teaching had some similarities to those being asked by SoTL researchers, but there wasn't much in the literature to connect the two.

Readings in the literature and discussions with colleagues suggest a number of reasons why evaluations are not commonly cited in SoTL research. These include widespread skepticism about the value of teaching evaluations in general (Balam & Shannon, 2010; McKeachie & Svinicki, 2006), and evaluation questions that don't provide useful, reliable data (Theall, 2010; Kember & Leung, 2009) As H. W. Marsh and L. A. Roche put it, "Poorly worded or inappropriate items will not provide useful information, whereas scores averaged across an ill-defined assortment of items offer no basis for knowing what is being measured"(1997, p. 1187).

Faculty cultures that separate teaching and scholarship may also hinder the use of evaluations in research (Chalmers, 2011; Dobbins, 2008). One of the key factors may be faculty reluctance to identify, name and publicize perceived problems with teaching (Bass, 1999). Bass contends that while classic research often begins with a "problem," faculty are reluctant to discuss their teaching in those terms. Admitting to a "problem" with teaching is a much more personal act, and one that could lead to repercussions from the reduced opinions of one's colleagues to denial of tenure or promotion. This has been taken up and illustrated more recently by a group struggling to institute frank discussions of teaching problems at their institution (Johnsen, Pacht, van Slyck & Tsao, 2009).

While many perceive that faculty should do more with formal evaluations than sigh and hide them in a drawer, only a few examples in the literature have even brief mentions of using evaluation to spark SoTL inquiry projects (Savory, Burnett and Goodburn, 2007; Bass, 1999; Smith, 2001, Yao & Grady, 2005; Hubball & Clark, 2011). The literature provides ample material on both SoTL and faculty evaluation, but very few sources explicitly link evaluations to the development of SoTL projects. Indeed many authors indicate that something should be done with information that arises from evaluations, but offer relatively little on what that something should be (Seldin, 1989; Kember, Leung, & Kwan, 2002;. Marincovich, 1998). Recently there has been some work on "closing the circle" (Morgan, 2008) to turn evaluation into action plan or reading student evaluations as evidence of student learning stages (Hodges and Stanton 2007). However, even this work does not make the further link to using SoTL as a means of identifying a research question or studying the impact of changes in teaching.

## Conceptual Framework & Model

As we reflected on aspects of teaching and scholarship, various models came to mind, including the concept of teaching as a cycle where we teach, assess and adapt. As Savory, Burnett, and Goodburn (2007) note, "Scholarly teachers use reflection, inquiry, testing and evaluation to examine and improve their own teaching, to increase their students' learning, and to contribute to broader conversations about teaching at their school" (p. 4); they continue "In general there are four major steps to carrying out an effective classroom inquiry: formulating an inquiry question, developing an

assessment strategy, evaluating the results of your study, and drawing conclusions and recommendations from those results" (p. 7). We found a similarity to our understanding of SoTL where we make an observation, reframe that observation into inquiry, plan and implement data gathering strategies, analyse the data in order to make claims that may improve student learning, implement new knowledge, and then reassess. Teaching, learning, and scholarship all lend themselves to these iterative models. We propose the following model to bring together the notion the evaluation of teaching informing of SoTL inquiry.
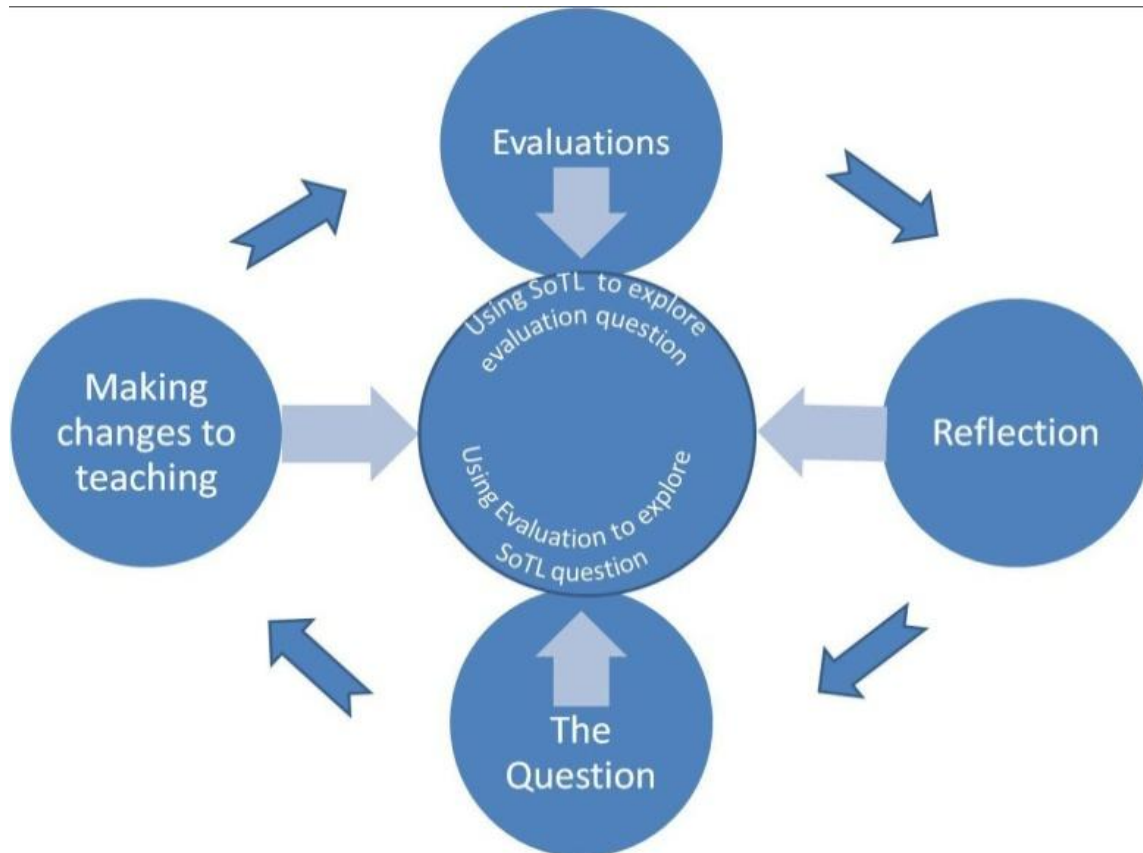


**Figure 1: Inquiry model**

The model is a visual representation of how evaluations of teaching can provide the genesis of questions for scholarship of teaching and learning inquiry. The model is intended to illustrate a recursive, iterative process where one can repeat the process at any point and for an infinite number of times. One can enter the model at any point where the evaluation process resonates and provides ideas for SoTL work. We recognize that the scholarship of teaching and learning needs to focus on student learning (Gale 2009), but data about teaching can be one way into the inquiry cycle.

## Research study

We decided to explore the connections between teaching evaluations and SoTL more deeply, which led to a presentation at the SoTL Commons conference and a

research project with the session participants as our sample population. We were curious: Did SoTL practitioners use their teaching evaluations as part of the inquiry cycle? We designed a research study to ask faculty members interested in SoTL about how they and their institutions evaluated their teaching, how they had used evaluation for SoTL inquiry and how they might use evaluation for SoTL inquiry. We secured ethics approval from both MRU and Georgia Southern University, host of the SoTL Commons.

## Data Gathering

At the SoTL Commons we ran a workshop entitled "Evaluating Teaching as a First Step to SoTL." In this workshop, we presented some of our work on TARGET, had participants fill out a worksheet on how their teaching was evaluated and whether these evaluations had ever sparked a SoTL inquiry, and asked participants to talk about the connections they saw between evaluating teaching and SoTL inquiry. The workshop was well attended, the discussion lively. At the end of the workshop, we described this research project and asked individuals willing to participate to leave their consent forms and worksheets behind. We also asked individuals if they would be willing to be contacted by email for a follow-up interview. Please see Appendix One for a copy of the worksheet.

## Sample

Sixteen individuals consented to participate. Because of the nature of the conference and title of the session, we have assumed that all who attended were interested in SoTL, whether or not they had conducted any SoTL research, let alone whether they had used teaching evaluations to shape this research. As we collated the data, we noticed that seven of the sixteen indicated previous experience with SoTL; nine indicated interest but little or no previous experience with SoTL. This is not to suggest that those who hadn't engaged in SoTL were less reflective in their practice or indeed less scholarly in their teaching. Some were not entirely sure what SoTL was. Some indicated confusion about how to get started: they said things like "we don't have a SoTL program—that's why I'm here." Some talked about SoTL as if it were program review or administrative assessment. All, however, had experienced many forms of evaluation, from informal reflection on teaching, through student evaluation of different sorts, to departmental and institutional evaluation. We recognize that the attitudes and practices described by these participants cannot be extrapolated to post-secondary faculty more generally; after all these individuals had already self-selected a SoTL conference and this particular workshop. However, analysis of their worksheets revealed some interesting patterns.

## Data Analysis

In analyzing the data, we decided upon a phenomenological approach. We were interested in what Creswell (2007) describes as "the meaning for several individuals of their *lived experiences* of a concept or a phenomenon" (p. 57). We recognize that institutional terms around and requirements for teaching evaluation vary and that individuals' interpretations of these evaluations vary. We also recognize that we bring our lived experiences about evaluation and SoTL to the research project. We first

transcribed all responses by question; however, we also assigned each participant a number so that we could track responses across categories. To analyze the data we engaged in a recursive process of reading and rereading, what Creswell (2007) describes as the data analysis spiral (p. 151). We first examined the data independently: reading the text, making notes and developing initial codes. We then triangulated our interpretations to establish credibility. We sought inter-coder stability for both codes and themes (Creswell, 2007, p. 202-203).

In analyzing the data, we made the following choices. We divided participants into SoTL practitioners and novices based upon their self-reported experiences and colour-coded their responses based on who was doing the evaluation of teaching. Was the activity being discussed self-evaluation, informal student evaluation, formal student evaluation, or peer evaluation? Some forms of evaluation could be used for multiple purposes within an institutional context. Therefore, we chose not to divide the evaluations into formative and summative. Certainly the formative or summative context affects not only the goals of the evaluation but also the form, content and process (Brent & Felder 2004; Conrad & Bowie 2006; Murray 1995; Smith & Tillema 2007; Wray 2008). However, the line between formative and summative evaluation in our professional lives is often not clear as institutions can use the same tools or activities for both purposes. Recognizing the multiple purposes to which teaching evaluations are put in an institution, we hoped one purpose would be the scholarship of teaching and learning.

## Findings

Examining the worksheets, we immediately noticed that the closer the evaluative act was to the individual faculty member, that is, the more control that individual felt over the data, the more comments were written. As the distance increased, the apparent relevance of teaching evaluation to the classroom and to SoTL appeared to decrease. Certainly, the answers to questions about how the individual evaluated his or her own teaching and how students evaluated teaching informally generated the most comments about how data had been used or could have been used for SoTL inquiry. This seems to support common definitions of SoTL as anchored in a scholar's own classroom practices. R. Smith (2001), promoting a developmental model from scholarly teaching to SoTL, focuses on "actions and activities initiated by the *individual* teacher, with the intent to collect information to inform *decisions about how to improve*" (p. 52) while Potter and Kustra (2011) suggest that critically reflective teaching is at the core of both SoTL and scholarly teaching. In our study, this was borne out, as at the prompt, "I evaluate my own teaching by. . .", nine of the sixteen wrote about critical reflection. Eleven of the sixteen used student comments, classroom assessment techniques including minute papers and surveys, informal emails and student learning reflections as a basis for self-evaluation. Comments about self-reflection and informal student feedback were much rarer when it came to how the department, faculty and institution evaluated teaching, as were the comments about the practice or potential for SoTL.

Formal student evaluation of instruction through survey instruments, though a prominent feature of how departments and institutions judged student satisfaction and teacher effectiveness, generated some SoTL activity, mostly focused on student perception of what was effective. Individuals did not report much self-reflection in

connection with those formal student evaluations, unlike the informal student evaluations. Although eight participants mentioned that some form of peer evaluation including, but not limited to, classroom observation took place, no one had used these peer evaluations as prompts for SoTL inquiries or identified ways they could have been used. The link between evaluation of teaching and classroom practice became more tenuous as institutional levels of evaluation took place, as did the link between the evaluation of teaching and SoTL. These findings echoed Richardson's survey of student feedback literature "Teachers may be less disposed to act on the findings of feedback…to the extent that it appears divorced from the immediate context of teaching and learning" (2005, p. 408). Yet a lot of institutional evaluation takes place requiring a lot of energy by both evaluators and instructors. We could be much more productive in how we use our evaluations, both as scholarly teachers and as scholars of teaching and learning.

In analyzing the data, we also came to realize that data from those individuals we had identified as SoTL practitioners didn't demonstrate quantitative or qualitative differences in using evaluative tools when compared with individuals interested in SoTL. They did not engage in more evaluation; they did not identify a greater level of self-reflection. What they did do, however, was disseminate the insights they had beyond their own classrooms, a constituent part of all types of scholarship (Shulman 1987; Trigwell & Shale 2004). For those interested in SoTL, but unsure of how to begin, we present a few examples of how to consider data already generated in formal institutionally-mandated processes through a new lens.

## Examples

Probably the most ubiquitous form of evaluation of teaching is some sort of formalized student survey. Sometimes the surveys focus on the evaluation of a course, sometimes on the evaluation of instruction or an instructor, rarely if ever on the evaluation of student learning. Student evaluation of courses or instruction is also the most researched form of teaching evaluation; for a summary of some of this research, see Gravestock and Gregor-Greenleaf (2008). As Gravestock and Gregor-Greenleaf note, "By a wide margin, course evaluations are used for summative, as opposed to formative, purposes" (p. 10). While some researchers have argued that course evaluations could be used to improve teaching and therefore learning (Goldschmid 1978), more often they are consigned to the bottom drawer of the filing cabinet. Studies demonstrate that student evaluations rarely impact teaching performance (Centra 1993; Marsh 2007); Hodges and Stanton (2007) argue that reflection on and consultation about student evaluations are "part of a scholarly approach to teaching" (p. 280). We suggest that they can also be part of an approach to the scholarship of teaching and learning. Reflecting on particular questions can provide impetus for SoTL projects. In what follows we each provide an example from our own practice.

### Example 1
One question on the Student Evaluation of Instruction (SEI) form used at our institution asks students to rate the following prompt on a Likert scale from one to five: "The instructor effectively relates the subject matter to areas of study beyond the course." As a faculty member in English, I find that the score for this question is often

lower than I would like, and in the past I have responded, uncritically and ineffectively, by increasing the number of "real world" examples in my classes. The year, however, I received a higher score on this particular question from a course surveying English literature to 1660 than in a general composition course focusing on critical writing and reading skills was the year I realized that there was indeed a problem in Randy Bass's (1999) terms.

I began to investigate this problem by using some of the techniques suggested in Murray (2001). I completed my own assessment of instruction at roughly the same time as the students; when I received the student data after the term, I compared results and reflected on the differences. Again, while I thought I had provided many examples and connections to other courses and other situations, the students did not. I began to frame the question differently. Perhaps the problem had to do with students providing examples and connections. This shift from focus on instruction to focus on learning was sparked in part by the formal student evaluations of instruction. It is one of the motivating factors behind a collaborative SoTL project into critical reading that I am participating in now (Carey 2010). As part of this project, a group of instructors ask students to reflect not only on what they have read, but what connections they can make with other readings or experiences and what they are going to do with that information. We gathered data in Winter 2011. My SEIs do not show a shift in that question, but the goal of the project is not to increase student evaluations. We want to learn how students demonstrate critical reading skills where critical reading is defined as reading for academic purposes and reading for social engagement.

### Example 2

Another example of using student evaluations took place in another discipline and classroom. As a nursing instructor, I was interested in how students perceived in-class learning activities and how these activities impacted their learning. Based on the SEIs, I identified two indicators that may reflect student involvement with the course materials. These were a) "The instructor communicates course content in ways that help me learn" and b) "The instructor is responsive to my learning needs as a student." Over the course of three semesters, the variety and intent of in-class group activities was increased to better communicate course materials in a meaningful way as well as be responsive to different learning styles. The course still had a significant amount face-to-face lecture, as well as a small group laboratory component.

I chose to run a pilot study over two semesters prior to instituting a SoTL inquiry. In consultation with SoTL colleagues, a question was developed as well as a review of the pertinent group-learning literature. A data gathering plan was developed for the actual inquiry, but in the meantime, the results of the SEIs would be considered in light of the intervention. The first semester saw a decrease in the SEI score with both indicators being reduced. How could I explain this? Student comments noted "far too much group work" and "group work taking away from course delivery". Other students in the class noted "group work can provide valuable insight and connection with peers".

In the following semester, the class contained the same amount of in-class group work with a dramatically increased SEI score in the two indicators. Student comments indicated "Teaching methods…are very interactive and encourages students'

participation," "Is sensitive to class and individual student needs," and "Encourages everyone to participate and fosters a learning environment". The differences in the student responses are of interest and provide an entry into the SoTL cycle of inquiry. A SoTL inquiry would take the initial pilot study to a formal inquiry with the addition of focus groups to explore the student experience of in class group work at a greater depth.

### Example 3

As a librarian, I was interested in how students perceived connections between the information literacy workshops done by librarians and the rest of their learning, especially learning beyond the classroom. My narrower question was whether there was a difference in these perceptions between students in professional or discipline-specific classes and students in general classes. Fortunately, a question on the librarian's SEI form asks students to check boxes indicating they felt the library session had been beneficial to their work on the assignment, in the course, in their academic career, or their life. They also had the option of checking a box if they felt the instruction was not relevant at all, but very few did so. I was able to secure ethics approval and the permission of all the librarians to review five years' worth of data for all librarians, totaling over 900 evaluations.

The analysis was fascinating. Senior history courses where students might be more likely to consider further studies as part of their life, and first-year English classes where the subjects of research assignments were open and therefore the instruction more general, saw the highest scores for 'relevant to my life'. While the data did not provide conclusive answers to my original question, it has provided some direction to develop future projects to better understand the connections students are making. The data also showed that high percentages of students considered the classes useful for their assignments, courses and academic careers, and having that data in aggregate has proved useful for the library. By focusing on a single question from the form, we obtained useful information that may change our practice and could lead to deeper research questions. This example also demonstrates the benefits of sharing data from more than one instructor to provide a broader picture of instruction.

## Conclusion

While the central focus of SoTL is learning, teaching evaluations can be a useful source of data for the SoTL cycle of inquiry. We have seen how data from these sources can inform various stages in the cycle from generating inquiries through providing insights on the impact of various interventions. Often, particularly with formal student evaluations, the data can illustrate longitudinal trends and patterns that are more difficult to see in research done on single classes; and as there may be some common instruments or questions in use at an institution, there may be greater possibilities for comparative studies between instructors, courses or programs. A further advantage is that the data is being gathered already. Faculty members are used to having their teaching evaluated; let's use those evaluations as prompts for reflection about student learning rather than institutional busy work. If you are interested in using teaching evaluations to open the door to SoTL, consider the following:

1. Examine all the ways you and your institution evaluate teaching – from personal reflection through institutional processes.

2. On formal evaluations, what questions are asked? Do they focus on learning or teaching? Are they within your control, i.e. not about the textbook, the schedule, etc.? Would they provide useful data on the impact of changes to your teaching?

3. In looking at your evaluations, are there patterns, or areas where students seem challenged, or areas that consistently go well or don't go well as you reflect on your teaching?

4. SoTL projects don't necessarily have to focus on problems with student learning or your teaching. If something's going really well, you might investigate why that's happening – why students appear to learn from a particularly activity or assignment.

5. Start small – focus on a particular aspect of teaching or learning. Teaching is a complex activity, and trying to understand the big picture may be overwhelming.

6. If you are investigating the impact on learning of particular aspects of teaching, try changes one at a time – you'll feel less swamped, and the impact of any changes might be easier to track.

Perhaps a final tip would be to encourage conversation and collaboration, both in reviewing the evaluations of teaching we undertake and in brainstorming ways of using data from evaluations to open the doors to SoTL inquiry. Our work together has deepened our understanding of both the processes of evaluating teaching and the nature of SoTL research, and our conversations have led to more ideas about SoTL projects than we could ever carry out..

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Appendix 1 – Participant Worksheet

| Evaluation processes/tools at my institution | How they have been used to support SOTL work | How they might be used to support SoTL work |
|---|---|---|
| I evaluate my own teaching by…. | | |
| My students evaluate my teaching by… | | |
| My department evaluates my teaching by…. | | |
| My faculty evaluates my teaching by…. | | |
| My institution evaluates my teaching by…. | | |

If you are participating in the study, please print your name so we can match documents with consent forms._____