ONTARIO EXTEND

Scholar Module

Scenario

I have been teaching in my discipline for several years and I am curious about practices that might improve my teaching and the success of my students. I would like to try a few new techniques in my class, but I'm unsure where to start, how big a change I should make initially, or whether the strategy I decide to implement will make a difference in student learning outcomes or their satisfaction with my course.

Scholar Scenario (Ontario Extend, 2017) https://www.youtube.com/watch?v=CoMWfeSKnRw

One of the toughest moments in my teaching career was as a guest lecturer for a face-to-face course in the School of Interactive Arts and Technology at Simon Fraser University. Most of my teaching up to that point had been as an instructor for a series of fully online courses. Now I was being asked to do the reverse of my experience—the dreaded lecture hall experience in front of 200 students, all of whom came to class armed with a laptop, cellphone or tablet.

Image Source: CC MCGunner on Imgur at http://imgur.com/N2PYK8S?tags

My instructor colleague asked that I not lecture for the full hour, but instead create an interactive experience that would engage the students and allow them to participate

throughout the class as a purposeful demonstration of a lecture topic on knowledge construction. My heart still beats rapidly when I think back to that day. I had to be fully prepped with an engaging set of activities for an hour or be prepared to potentially "bomb."

My approach was straightforward:

- I used Google to research teaching practices for bringing interactivity and engagement to large-scale lectures.

- I researched how to employ the students' own technology effectively in lecture halls to support learning engagement and lesson outcomes.

The result was a one-hour lecture divided into three parts that involved the students individually, in pairs, and as a whole class, using three interactive activities linked to the ideas associated with knowledge construction. I think it worked, but I went away wondering how I would handle the same group of students over an entire course and what framework I might use to research teaching strategies for large-scale lecture experiences in the future.

The possibilities are endless!

Overview

This module examines how you can use your classroom, your courses and/or your professional area of practice as a research lab to explore how you might improve your teaching practice and positively affect learner outcomes and their satisfaction with the overall learning experience. It invites you to consider research about teaching and learning within your discipline and provides a process to implement a research plan.

This kind of action research is often called the "scholarship of teaching and learning" (SoTL), and it involves an awareness and appreciation of effective, research-based, discipline-appropriate pedagogical approaches for examining your own practice.

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> *"The scholarship of teaching is not merely teaching our scholarship. Nor is it simply teaching well… The scholarship of teaching means that we invest in our teaching the intellectual powers we practice in our research"*
>
> (Bender and Gray, 1998).

Outcome

Create an action plan to examine key questions about improving learning outcomes in a specific discipline area using your own professional practice, informed by the research of others, to build your SoTL plan.

Objectives

- Explore key characteristics of SoTL.

- Identify instructional practices or teaching strategies from your own discipline that you would like to explore or test within your own courses.

- Identify a range of research strategies that suit your discipline.

- Identify a framework for analysis of your research.

- Select a strategy for sharing your research for others to build on.

The Scholarship of Teaching and Learning (SoTL)

To learn more about SoTL, watch: The Key Characteristics of the Scholarship of Teaching and Learning (Center for Engaged Learning (CELatElon), September 2013).

This video features several educators defining SoTL in the context of their own professional practice.

Everybody involved in teaching has questions about the success of their practice. We deal with some of the questions informally all the time. In other cases, we seek to formalize our enquiry by doing research, and that is what SoTL is about. The purpose of SoTL is to improve learning by implementing optimized teaching practices based on research and evidence to support changes in practice.

Visit the Extend Community Space SoTL Short Video discussion area (in the #scholar channel) to identify which Brock University SoTL video resonated with you the most and why. Would you recommend it to a colleague?

Extend Activity

The educators in the videos express multiple experiences about SoTL. Think about which of the experiences are similar to your own.

- From this video, identify three key characteristics of SoTL that resonate with your professional experience and practice.
- Open our editable Keys of SoTL Google Doc and add your name and three keys to the bottom of the document.
- Compare your SoTL keys to ones listed by your colleagues.

Take a screenshot of your contribution to share as an uploaded evidence for your response to the Three Keys of SoTL activity. Copy your keys as well in your response and include any additional ideas you gain from the ones that your colleagues identified. Use the Google Docs feature to add a comment to other responses that strongly align with yours.

As evidence of completion, please plan to enter the web address for your response in the Scholar badge submission form.

Scholarly Teaching

The Scholarly Teacher applies evidence-based practice to enrich student learning (https://www.scholarlyteacher.com/about)

When teaching and learning are grounded in the scholarship of teaching and learning we treat our classrooms and programs as a source of interesting questions about learning; find ways to explore and shed light on these questions; use this evidence to design and refine new activities, assignments, and assessments; and share what we have found with colleagues who can comment, critique, and build on new insights (Huber and Hutchings, 2005).

Scholarly teaching is, at its core, an approach to teaching that is informed by inquiry and evidence (both one's own, and that of others) about student learning. It focuses on examining

the ways in which we construct the learning environments that we offer students, the attention we pay to students and their learning. In the book, Making Teaching and Learning Visible (Bernstein, Burnett, Goodburn and Savory, 2006), the authors make the point that, "An excellent teacher is one who is engaged in a well-prepared and intentional ongoing investigation of the best ways to promote a deep understanding on the part of as many students as possible." (2006, p. 215)

And, that, is what Scholarly Teaching is all about. It is about seeking evidence that what we are doing is getting at the heart of learning and it is about sharing what we know and the evidence that we have with our colleagues.

The Value of SoTL and Scholarly Teaching for those in Instructional Roles

Many SoTL practitioners, publications, and journals list potential benefits of a proactive approach to classroom scholarship, some of which are articulated in Making a Case for SoTL. This video also makes a case for institutions to support those who are engaging in SoTL research.

Extend Activity

From the list of potential benefits below, pick the top three statements that would motivate you to become more engaged in SoTL activities. You might also consider other benefits that you can think of that are not on this list.

- Improved outcomes and assessment scores.
- Useful data for assessments, program reviews, retention strategies, and accreditation processes.

- Faculty development opportunities.
- Increased reflection on teaching and learning among colleagues.
- Stronger institutional values on teaching and learning.
- Promotion of new networks among members at institutions.
- Scholarship opportunities in the form of presentations and publications.
- Opportunity for outside funding to support program innovation.
- Renewed excitement about teaching and learning, and greater self-awareness.

Return to the shared document where you added your Three Keys for SoTL (for Three Keys activity). Edit your entry to include the three top motivations you chose from this list. Review and add comments to the motivations contributed by other participants.

Take a screenshot of your list of motivations to share as an uploaded evidence for your response to the Engage with SoTL activity. Copy your list of motivations as well in your response and include any feedback that you gain from the ones that your colleagues identified. Review and add comments to the motivations contributed by other participants

As evidence of completion, please plan to enter the web address for your response in the Scholar badge submission form.

Considerations for your SoTL Project

As an experienced educator you have already done some research in this area and published it, or you might be thinking of doing some research. But now you need to consider how to conduct research for your context.

Watch the video Examples of SoTL Projects which provides examples from three instructors who describe their research projects, the questions they were seeking to answer, and how they benefited from the experience.

The video participants describe their large and small-scale questions, and research projects that were very specific to their disciplines and their interests. You may wish to start small with your own research.

Like any research project, a SoTL project requires you to formalize your research approach. Remember, **what is different about SoTL is that the focus is on improving learning outcomes as a result of practices you implement, research, assess, and report.**

Typical considerations include:

- Identifying a research problem or a challenge of practice that interests you.

- Developing a research question from the identified problem or challenge.

- Using relevant literature to inform your study.

- Designing a specific project and choosing an appropriate methodology.

- Obtaining Research Ethics Board (REB) Approval for your research

- Finding support or funding to provide you time and space to conduct the research.

- Considering a networking and dissemination strategy to share your research and invite discussion from colleagues.

Your own research experience may predispose you to follow a deductive or quantitative approach to test a current approach to the problem. Alternatively, you may wish to take a more exploratory, inductive approach using qualitative methods to illuminate new thinking about a teaching/learning problem. It is really up to you what approach you take.

What kinds of problems about teaching practice interest you?

There are some well-known areas of practice that SoTL researchers have probed through classroom projects. Examples from SoTL projects are made available to educators to explore through the University of British Columbia resources:

- Flipped classroom

- Experiential learning

- Blended learning

- Peer assessment and feedback

- Helping students to get the most out of studying

- Test-enhanced learning

- Student misconceptions

Other Tools to Support SoTL Research, Design and Organization

The University of British Columbia provides SoTL Explorer, which you can use as you consider how to frame your projects in a research context: http://sotl-explorer.sites.olt.ubc.ca

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Extend Activity

Now we move into the phase where you will outline a research plan for an SoTL project in your area of interest.

You will be doing your work in a document that will be used for the remaining activities in this module, and eventually shared in a SoTL Research Plan Folder with the ones done by previous participants.

If you want to work in Google Docs, you can make a copy of the SoTL Research Plan template that is saved in your own Google account. When the copy is made, edit the file name to include your name. Or, if you prefer to edit in another format, you can view the document now and use the **File** -> **Download** menu to save it as a MS Word document.

- Examine each of the practice resource links provided in the Considerations section of the Scholar Module and the UBC SoTL Explorer.
- For more ideas in this step, review the planning documents in the SoTL Research Plan Folder by colleagues who completed this module.

- Edit your SoTL Research Plan (Google Doc or MS Word) to describe your thinking about an area of research interest and a potential framework you are considering.
- If you are using a Google Doc, click the **Share** button in the top right, then **Get Sharable Link** to find the web address for sharing your document. If you are using MS Word, you can upload your file. Either way, this is how you can share your planning in a response to the Refine Your SoTL Plan activity.

As evidence of completion, please plan to enter the web address for your response in the Scholar badge submission form.

Designing Your SoTL Project
Now comes the interesting part: designing a SoTL project of your own.

The Higher Education Quality Council of Ontario (HEQCO), the University of Guelph, and Western University provide useful links for planning a SoTL research projects:

[Researching Teaching and Student Outcomes in Postsecondary Education: A Guide](#) published by the Higher Education Quality Council of Ontario.

University of Guelph: [Engaging in SoTL](#)

Western University: [Resources for Preparing your Research Proposal](#)

Each of these sites also discusses the types of data collection strategies you might consider, such as:

- Portfolios

- Interviews and focus groups

- Observational research

- Questionnaires

- Experiments and quasi- experiments

- Case studies

- Secondary analysis of analytical data that may already exist

It is up to you to select the method that best suits your problem and intent.

Ethics of SoTL Research

As you design your project remember that SoTL research primarily addresses the impact of one's teaching practice upon learning. SoTL's ethical challenges stem from the fact that this has the potential to create a power differential between the researchers and their learners. In situations where we conduct research in our own classrooms, these issues can be complicated by our dual responsibilities as both teacher and researcher and by the power differential inherent in the relationship between teacher and learner. Other potential issues may arise around the confidentiality of data, the use of instructional time for research and learners

feeling compelled to participate in the research for fear of non-participation impacting their grades or course/certificate completion.

Institutions of higher learning throughout Canada have adopted the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) as the core human research ethics guideline. The information on the TCPS2 website covers the ethical conduct of all faculty (full- or part-time), post-doctoral fellows, graduate students, undergraduate students and staff ho conduct research with humans, including research on teaching, learning and student outcomes. The website provides considerable support materials.

SoTL researchers should contact their institutions' research ethics offices early in the research design phase to ask for advice about how to address any ethics issues that might arise during their SoTL research.

Extend Activity

- Based on the Scholar module and its consideration and design links, continue to design and build your own SoTL plan using the document created in the Refine Your SoTL activity (a copy of the template as a Google Doc or downloaded MS Word file).
- Include considerations of any ethical concerns with the research you are planning.
- If you are using a Google Doc, click the **Share** button in the top right, then **Get Sharable Link** to find the web address for sharing your document for others to view. Use this address when you add your response to the Design Your SoTL Project activity or upload the current version of your MS Word document version.

As evidence of completion, please plan to enter the web address for your response in the Scholar badge submission form.

Publishing and/or Presenting Your SoTL Research

Before you present or publish your own SoTL research, take the time to examine and learn from what others have done.

Below is an example from Simon Fraser University. The SoTL research involved professors in the Mathematics Department along with professional staff form the Centre for Teaching and Learning. The team produced a number of videos and mounted them on a YouTube video channel as an advance organizer for large-enrollment, first-year calculus classes. The videos were designed to serve as self-study teaching materials for a flipped classroom teaching model

that the researchers implemented. They conducted research, produced presentations using PowerPoint slides, and published and disseminated papers on the SoTL study.

https://www.youtube.com/watch?v=5a32bhjm46k

http://www.sfu.ca/~jtmulhol/presentations/2014-CMEF.pdf

https://cms.math.ca/Events/CMEF2014/vignettes/29V%20-%20Jamie%20Mulholland.pdf

http://www.youtube.com/watch?v=ScfOAOTG6Fk

Extend Activity

Reflective practice is a key component of SoTL activity. Often, it is the reflections that practitioners make on their work that become the stimuli for their research ideas. Being reflective can also aid in creating a thoughtful dissemination strategy for your work.

- Have a good look at each of the SoTL research outputs from the SFU Math project—especially the demonstrations of scholarship—from the SFU SoTL study. Reflect on your own project planning and think ahead to how you might share your results.
- Now that you have thought about how you might share your results. Update the last section of your SoTL research plan with a dissemination strategy for making public the key findings of your research study. Use the document (a copy of the template as a Google Doc or downloaded MS Word file) created in the Refine Your SoTL activity and modified in the Design Your SoTL Project activity.
- If you are using a Google Doc, click the **Share** button in the top right, then **Get Sharable Link** to find the web address for sharing your document for others to view. Use this address when you add your response to the Reflecting for Disseminating Your SoTL Project activity or upload the current version of your MS Word document version.

  As evidence of completion, please plan to enter the web address for your response in the Scholar badge submission form.

Sharing Your SoTL Plan

Now that you have completed the sections of the Scholarship module, you can begin to present your ideas for your peers and colleagues.

Extend Activity

One last activity is required to complete this module. It includes the following components:

- **Share your SoTL Research Plan in the SoTL Folder**. If you worked on your project plan as a Google Doc, move a copy of it to the **SoTL Research Plan Folder**. To do this, first visit the folder. From the dropdown menu under label **SoTL Folder**, select **Add To My Drive**. This places a reference to this folder in your own Google Drive. Now navigate in your own Drive to find your Research Plan document. Right or control click on the name in the directory listing, and use the Move command to list your document in the **SoTL Folder** (Note: this does not remove your file, it places a reference for it inside the shared folder). On the other hand, if you composed your plan as a Word document, visit the SoTL Folder. To share your file in this directory, drag and drop your file into the folder.
- **Link / Upload your plan in your response to** the **Share Your SoTL Research Plan activity**. If you are using a Google Doc, click the **Share** button in the top right, then **Get Sharable Link** to find the web address for sharing your document for others to view. Use this address when you add your response to this activity or upload the current version of your MS Word document version.
- **Write a reflective response.** Your response to this activity should reflect your thinking from the beginning of the Scholarship module to the point now where you have planned a research project. Describe your research questions, the prior research you will undertake to inform your research design, your plan of action, and a dissemination strategy.
- **Visualize where the project will go.** Also in your response, insert an open-licensed or original image that represents the direction you intend to go with this SoTL research (for help in finding images, see the Consider This activity from the Curator module.

As evidence of completion, please plan to enter the web address for your response to the Share Your SoTL Research Plan activity in the Scholar badge submission form.

Module Checklist

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I have satisfied the following criteria and will submit evidence in the requested fields when applying for the Teacher for Learning badge. Your profile page in the Activity Bank provides links to all the responses you have submitted.

Criteria and Evidence Required for Badge Assessment – I have:
Identified three key characteristics of the Scholarship of Teaching and Learning (SoTL) that professionally resonate with me.   **Evidence:** Enter the web address for your response to the Three Keys of SoTL activity.
Determined motivational reasons for becoming engaged in SoTL activities   **Evidence:** Enter the web address for your response to the Engage with SoTL activity.
Further refined my SoTL plan.   **Evidence:** Enter the web address for your response to the Refine Your SoTL Plan activity.
Designed a SoTL plan for one of my courses.   **Evidence**: Enter the web address for your response to the Design Your SoTL Project activity.
Determined a SoTL research plan dissemination strategy.   **Evidence:** Enter the web address for your response to the Reflecting for Disseminating Your SoTL Project activity.
Shared my SoTL research plan.   **Evidence:** Enter the web address for your response to the Share Your SoTL Research Plan activity.
Reflected on the module experience.   **Evidence:** Enter your reflection statement into the space provided on the badge submission page.

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