A. Pre-Writing: Students and Community-Engaged Learning

1. As you think about your students and community-engaged learning, what are you curious about? What questions do you have about students’ learning?

2. What evidence do you have that they are learning? (or not?)

3. What is missing? What other evidence would you like to have?
As a “scholarly teacher,” you have looked at the literature on how to create a strong community-engaged course and how to assess students’ learning. Scholarly teaching and the scholarship of teaching and learning are part of the same whole.

Diagram adapted from https://my.vanderbilt.edu/sotl/understanding-sotl/why-sotl/

**B. Background: SOTL and the Big Picture**

Ernest Boyer coined the term, “scholarship of teaching,” in his 1990 book, *Scholarship Reconsidered: Priorities of the Professoriate*. The concept had been used in many disciplines prior to Boyer’s work, but he placed it in a larger context and give it a name.

Boyer (1990) proposed four areas of scholarship (pp. 15-25):

- **Discovery**: new and unique knowledge is generated
- **Integration**: connections are made among disciplines to understand a broader context
- **Application**: bridges the gap between worlds inside and outside the academy, centered in context of disciplinary understanding
- **Teaching**: bridges are built between the teacher’s understanding and students’ learning; “When defined as scholarship, however, teaching both educates and entices future scholars (p. 23)” [This definition has been developed and refined since Boyer, 1990]

“What we urgently need today is a more inclusive view of what it means to be a scholar – a recognition that knowledge is acquired through research, through synthesis, through practice, and through teaching.” Various kinds of academic work (or, intellectual functions) interact dynamically and form an interdependent whole (pp. 24-25)

http://ctlblog.calpoly.edu/teachinglearning/complete-the-cycle-sotl-and-the-teacher-scholar/

Center for Teaching and Learning, CalPoly
C. Definitions of Scholarship of Teaching & Learning (SOTL)

Definitions mostly excerpted from Kathleen McKinney, “What is SOTL in Higher Education?”

At Illinois State University, we have agreed to conceptualize SOTL as “systematic reflection on teaching and learning made public.”

In work at the Carnegie Foundation, the following definition has been used: “problem posing about an issue of teaching or learning, study of the problem through methods appropriate to the disciplinary epistemologies, applications of results to practice, communication of results, self-reflection, and peer review” (Cambridge, 2001).

Martin, Benjamin, Prosser, and Trigwell (1999) argue that the scholarship of teaching is three related activities: engagement with the existing knowledge on teaching and learning, self-reflection on teaching and learning in one’s discipline, and public sharing of ideas about teaching and learning within the discipline.

Pat Hutchings (2002), senior scholar at the Carnegie Foundation, reminds us that SOTL builds on many past traditions in higher education including classroom and program assessment, K-12 action research, the reflective practice movement, peer review of teaching, traditional educational research, and faculty development efforts to enhance teaching and learning.

From Bowen (2010) “For an increasing number of faculty members, service learning provides a sustainable approach to pedagogical scholarship. As they integrate community service into the curriculum, faculty members sometimes formulate an assessment plan to determine the impact of this pedagogy on student learning. Some go further by disseminating the outcomes of the assessment in various venues.”

What key concepts do you see in these definitions of SOTL?

Also see VIDEO: Scholarship of Teaching and Learning vs. Scholarly Teaching (8 min)

Presented by the International Society for the Scholarship of Teaching and Learning (ISSOTL) & The Center for Engaged Learning at Elon University. SOTL Scholars Dan Bernstein, Mary Taylor Huber, Pat Hutchings, and Gary Poole compare Scholarly Teaching and the Scholarship of Teaching and Learning. This video was produced for ISSOTL Online 2013.

https://www.youtube.com/watch?v=eedxoj1CPnk
D. 5 Principles of Good Practice in SOTL (Felten, 2013)

<table>
<thead>
<tr>
<th>Principles of Good Practice in SoTL</th>
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</thead>
<tbody>
<tr>
<td>Inquiry focused on student learning</td>
</tr>
<tr>
<td>Grounded in context</td>
</tr>
<tr>
<td>Methodologically sound</td>
</tr>
<tr>
<td>Conducted in partnership with students</td>
</tr>
<tr>
<td>Appropriately public</td>
</tr>
</tbody>
</table>

E. Typical Components of a SOTL Project

1. Start with a question about student learning – a bottleneck, obstacle, learning that’s superficial, resistance, new kinds of knowledge or skills needed, a new pedagogical strategy, or new technology used. Consider the context and motivation for conducting research on this question. See Hutchings (2000) framework for questions:

- **What works?** Questions that seek “evidence about the relative effectiveness of different [teaching] approaches.”
- **What is?** 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:** 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:** Questions designed to build theoretical frameworks for SoTL similar to frameworks used in other disciplines.
2. **Review relevant literature**
   
a. consult with Marcia Rapchak, rapchakm@duq.edu, CTE’s library liaison for SOTL projects  
b. consider research in your discipline as well as related fields  
c. look at calls for this kind of research, existing models, theories, potential replications, issues researchers/disciplinary association have raised  

   **You will likely be wearing TWO hats: teacher & researcher**

3. **As teacher** – write the learning goals you have for students. Plan the teaching/learning strategies. What will the teacher be doing? The students? Who else is involved (e.g., in clinical or community setting)? How will you assess student learning for a course grade?

4. **As researcher** – write the research questions and plan your methods for gathering and analyzing evidence of learning related to these questions. What theoretical framework will you use?

   Look for the most natural ways integrated into normal teaching and learning activities? (This way you get the best student work = strongest evidence). Conduct an inventory of the student learning data you already collect (e.g., writing, presentations, exam results, skills tests, reflections, preceptor evaluations).


5. **Involve your students.**
   
a. Mandatory: Institutional Review Board – Researchers need to get IRB approval for the use of human subjects if they plan to present findings on student learning beyond our own campus in presentations or publications. See Duquesne University Human Subject Research Policies and Procedures. You have to do this BEFORE gathering the data. The research process needs to be separate from the grading process; students must have the option of participating or not. Get student consent and gather the data; have it de-identified. Have these data held for you securely until the grades are in. See David Delmonico presentation of “IRB Considerations for Conducting Research with Students and Community Members as Respondents” http://guides.library.duq.edu/sotl.

b. Encouraged and very valuable to teachers and learners: Engage students in the research process
6. **Analyze and interpret the findings** – in the light of other research and theories, your past experience, the larger context (Duquesne, disciplinary association initiatives).

7. Make your work public. Submit your findings to **peer-reviewed venues**. Check with editors ahead of time about the fit and format so that you don’t waste time. (Consider blogging first – as a way to begin making your ideas public for comment, e.g., CTE blog: [https://flourishingacademic.wordpress.com/](https://flourishingacademic.wordpress.com/))

### Selected References

**Websites:**

- Duquesne University LibGuide: [http://guides.library.duq.edu/sotl](http://guides.library.duq.edu/sotl)
- Vanderbilt Center for Teaching, The SOTL Guide. [https://my.vanderbilt.edu/sotl/](https://my.vanderbilt.edu/sotl/)
- Georgetown Visible Knowledge Project. [https://blogs.commons.georgetown.edu/vkp/](https://blogs.commons.georgetown.edu/vkp/)
- International Society for the Scholarship of Teaching and Learning [www.isotl.com](http://www.isotl.com)
- The Scholarship of Teaching and Learning, Illinois State University [http://sotl.illinoisstate.edu/](http://sotl.illinoisstate.edu/)
- Taylor Institute for Teaching and Learning [http://www.ucalgary.ca/taylorinstitute/sotl](http://www.ucalgary.ca/taylorinstitute/sotl)

**Publication outlets**

- Illinois State University provides links to [journals by discipline](http://www.illinoisstate.edu/sotl/) that publish SOTL articles, as well as helpful organizations and programs by discipline.
- Illinois State has also shared a [core list](http://www.illinoisstate.edu/sotl/) of SOTL journals.


McKinney, K. (2007). *Enhancing learning through the scholarship of teaching and learning: The challenges and joys of juggling*. Bolton, MA: Anker. This is a handbook on SOTL.

Nelson, C. (2003). Doing it: Examples of several of the different genres of the scholarship of teaching and learning. *Journal on Excellence in College Teaching* 14 (2&3), 85-94. Groups SOTL into genres: e.g., reports on particular classes, reflection on teaching informed by SOTL, comparisons of courses or of student change over time, learning science, analyses of sets of prior studies.