As you settle in, think about and *note*…

THE SORT OF INSTITUTION WHERE YOU TEACH

WHAT YOU TEACH

YOUR STUDENTS

COMMON DIFFICULTIES STUDENTS FACE IN YOUR COURSE

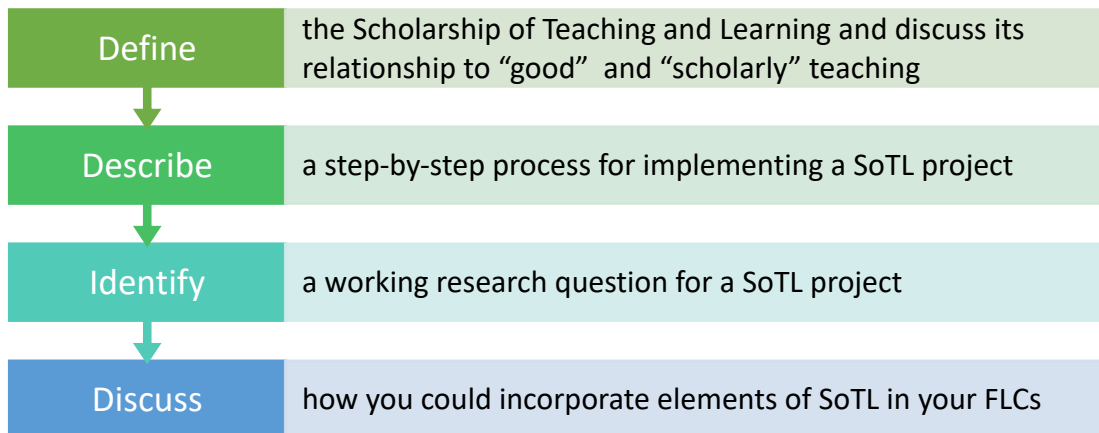YOUR PREFERRED TEACHING METHODS AND ASSESSMENTS

OTHER IMPORTANT VARIABLES YOU ENCOUNTER

Doing SoTL

- Jim Berger, Georgia College
- Kathryn Crowther, Perimeter College, Georgia State University
- Michele DiPietro, Kennesaw State University
- Mark Johnson, Abraham Baldwin Agricultural College
- Deborah Richardson, Augusta University

By the end of this workshop, you should be able to

Define	the Scholarship of Teaching and Learning and discuss its relationship to "good" and "scholarly" teaching
Describe	a step-by-step process for implementing a SoTL project
Identify	a working research question for a SoTL project
Discuss	how you could incorporate elements of SoTL in your FLCs

Objectives

Why do SoTL?

You have already committed time and energy to the Chancellor's Learning Scholars program and the FLC
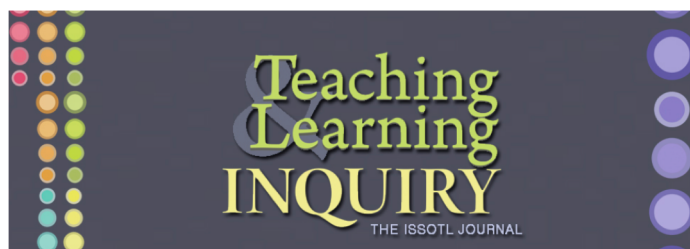
Get a publishable product out of this!

SoTL Conferences

Teaching Conferences Directory Center for Excellence in Teaching and Learning
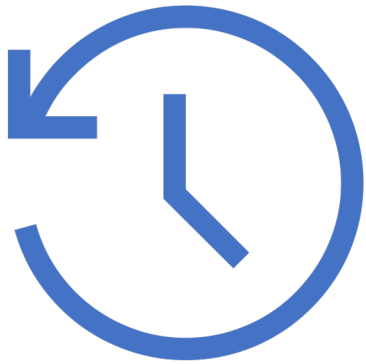Kennesaw State University
http://cetl.kennesaw.edu/teaching-conferences-directory

SoTL Journals

Teaching Journals Directory Center for Excellence in Teaching and Learning
Kennesaw State University
http://cetl.kennesaw.edu/teaching-journals-directory

SoTL Awards!

USG SoTL award:
https://www.usg.edu/faculty_affairs/awards/regents_scholarship_of_teaching_and_learning_awards

History & Definitions

A short history of SoTL

Boyer report (1990) argued that teaching should be considered—and carried out as—a form of scholarship

Very convincing argument, as you can see from the journals and conferences and professional societies it sparked
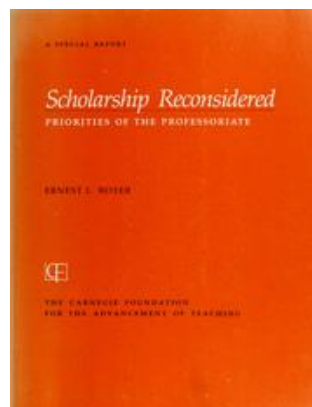
From Good Teaching To SOTL

Good Teaching

Scholarly Teaching

SOTL

Good Teaching

All faculty have an obligation to teach well, to engage students, and to foster important forms of student learning – not that this is easily done. Such teaching is a good fully sufficient unto itself.
> - Hutchins & Shulman, 1999

Reflective and informed

Collect evidence of success (e.g., classroom assessment)

Incorporate current ideas in discipline content and pedagogy

Invite peer collaboration and review

Scholarly Teaching (Richlin, 2001)

Scholarly Teaching

We are all expected to be scholarly teachers at the USG!

"All faculty members are encouraged to enhance their classroom instruction by using scholarly teaching."

USG Academic and Student Affairs Handbook 4.7.2
https://www.usg.edu/academic_affairs_handbook/section4/C691/

SoTL focuses on *systematic* inquiry into student learning and/or one's own teaching practices in higher education

As **scholarship**, it must:
- Use sound methods appropriate to the research question
- Be peer reviewed and *evaluated*
- Be *disseminated* as scholarly work

When we do SoTL we join the global conversation on teaching and learning!

Step-by-step model for SoTL

How to do SoTL

Steps in a SoTL study

1. Identify the research question

2. Design the study

3. Collect the data

4. Analyze the data and draw conclusions

5. Present and publish your SoTL project

- Bishop-Clark & Dietz-Uhler (2012)

Identify the research question	Will TiTLing an assignment lead to improved products (and better grades)?
Design the study	TiLT half of the assignments and leave the other half un-TiLTed. [will need IRB approval]
Collect the data	Review assignment grades and/or rubric categories
Analyze the data; draw conclusions	Compare performance on TiLTed and non-TiLTed assignments
Present and publish your SoTL project	Find a disciplinary or general SoTL conference and submit it

Example (adapted from B-C & D-U 2012)

1. Identify the research question

Sources for research questions

- Situational context
  - Institutional characteristics
  - Student characteristics
  - Student challenges
  - New teaching methods
- Use the FLC topics for inspiration
- Start from the *bottlenecks* in your courses (Middendorf & Pace, 2004)

Generating a productive research question can be a challenge
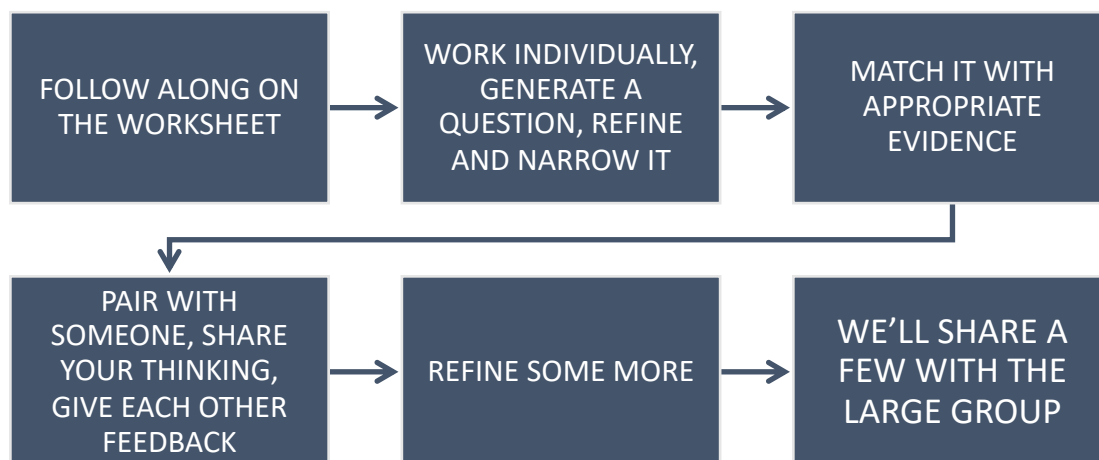
Usually the first questions that come to mind are too broad, difficult to tackle, or unmeasurable

We often need to narrow them down to a measurable question

For example…

```
                    ┌─────────────────────────────┐
                    │ What are best practices for │
                    │    inclusive pedagogy?      │
                    └─────────────────────────────┘
        ┌───────────────────┼───────────────────────┐
┌─────────────────┐ ┌─────────────────┐ ┌─────────────────────┐
│ What are current│ │ What assignments│ │ Do students learn as│
│  approaches to  │ │reinforce inclusive│ │ much with inclusive │
│inclusive pedagogy?│ │   pedagogy?    │ │     pedagogy?       │
└─────────────────┘ └─────────────────┘ └─────────────────────┘
         │           ┌──────┴──────┐              │
┌─────────────┐ ┌─────────────┐ ┌─────────────┐ ┌─────────────────┐
│ Instructors'│ │  Syllabus   │ │LMS Analytics;│ │ Pre-post tests │
│   reports   │ │  analysis   │ │Student reports│ │ with a control │
└─────────────┘ └─────────────┘ └─────────────┘ │    section;    │
                                                 │                │
                                                 │  Longitudinal  │
                                                 │  data across   │
                                                 │  the semester  │
                                                 └─────────────────┘
```

Your Turn

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┌──────────────────┐    ┌──────────────────┐    ┌──────────────────┐
│ FOLLOW ALONG ON  │───▶│ WORK INDIVIDUALLY,│───▶│  MATCH IT WITH   │
│  THE WORKSHEET   │    │   GENERATE A     │    │   APPROPRIATE    │
│                  │    │ QUESTION, REFINE │    │    EVIDENCE      │
│                  │    │  AND NARROW IT   │    │                  │
└──────────────────┘    └──────────────────┘    └──────────────────┘
                                                          │
┌──────────────────┐    ┌──────────────────┐    ┌──────────────────┐
│   PAIR WITH      │    │                  │    │                  │
│ SOMEONE, SHARE   │    │ REFINE SOME MORE │───▶│  WE'LL SHARE A   │
│ YOUR THINKING,   │───▶│                  │    │  FEW WITH THE    │
│ GIVE EACH OTHER  │    │                  │    │   LARGE GROUP    │
│   FEEDBACK       │    │                  │    │                  │
└──────────────────┘    └──────────────────┘    └──────────────────┘
```

In your packet

- **Research question handout**
- Annotated bibliography
- Blank SoTL planning template to use in your FLCs
- Annotated worksheet
- Worked out example focusing on flipped courses

Digital versions will be available on the USG website:

https://www.usg.edu/facultydevelopment/chancellors_learning_scholars

2. Design the study

2. Design the Study

Conduct a pilot study: Develop pedagogies/measures

Choose a research approach: Align approach and question

- Descriptive studies
  - "What is….?"
- Experiments or Quasi-experiments
  - "What works?"

Design Study – Continued

Where do data come from?

Observations
Case Studies
Surveys
Interviews/Focus Groups
Single Subjects

Student Participation in Research: Considerations

Students = human subjects → ethics review, usually by "Institutional Review Board"

- Informed consent
  - (Parental consent for minors)
- Right to privacy (confidentiality, anonymity) and data security
- Risk of harm
- Debriefing

Do you know the website for your institution's IRB?

Timeline: What's reasonable/feasible?

Heavily constrained: January-April!

Need time for question refinement, literature review, IRB, and data collection

Pilot!

What works vs. What is

3. Collect the data

Fundamental data principle

Start by looking at what data are already available

- Does it help answer your question?
- What are examples of already available data?

Already available data

Syllabi and other course materials

Student evaluations (numerical/comments)

Student Outputs (exams, papers, etc)

Discussion boards on LMS

ANYTHING (esp. metadata) on LMS!!

Assessment reports

Placement data

Sources of evidence

Selecting measures: Student behaviors, learning, attitudes

- Frequency Counts
- Archival measures (e.g., Transcripts)
- Surveys
- Tests
- Rubrics
- Classroom Assessment Techniques (Angelo & Cross 1993):
  - Minute paper/muddiest point
  - Background knowledge probe
  - Problem recognition tasks

4. Analyze the Data and Draw Conclusions
5. Present and publish your SoTL project

General Considerations for Analysis and Publication

What support do you have at your institution for various kinds of data analysis?

- Statistics and data analysis center
- Colleagues specializing in specific methods (co-authorship?)
- Centers for Teaching and Learning

What conclusions are warranted?

- Generalizations?
- Limitations?
- Future research?

SoTL is its own genre and has a wider audience, so write accordingly

- Read other SoTL articles

(6.) Change the campus culture!

Questions for reflection or discussion

How is SoTL regarded at your university?

How does it figure in Promotion and Tenure guidelines?

Who are the people on campus who "get it?"

How can you leverage the USG focus on SoTL to elevate its profile at your institution?

Resources

What's next?

You could facilitate a SoTL FLC

    Learning how to do SoTL

    Reading SoTL

    Developing SoTL project(s)

Or…

You could incorporate SoTL in your topical FLC

- Small teaching: examine effect of teaching changes
- Mindset: Does teaching to growth mindset make a difference in student success?
- Inclusive pedagogy: Does it have a positive effect on the learning environment?
- TiLT: Do TiLT assignments lead to better student products?
- Course Design: Does explicit incorporation of learning outcomes throughout the course produce better student understanding?

And there are resources to help you

SoTL Resources: The Boyer Model of Scholarship

1990:   *Scholarship Reconsidered*
1997:   *Scholarship Assessed*
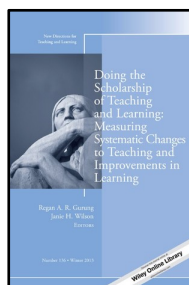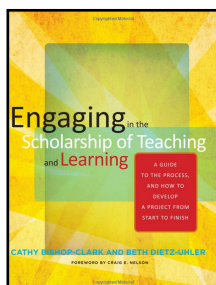2011:   *The Scholarship of Teaching and Learning Reconsidered*
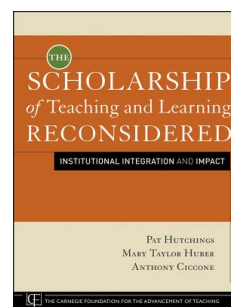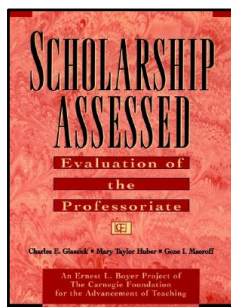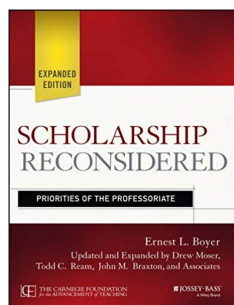
SoTL Resources: Books on Conducting SoTL

Bishop-Clark and Dietz-Uhler (2012)

Gurung and Wilson (2013)

McKinney (2013)

Chick (2018)
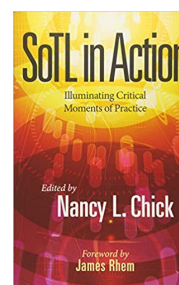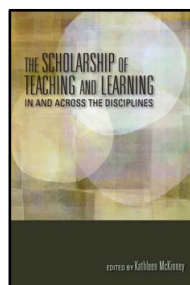
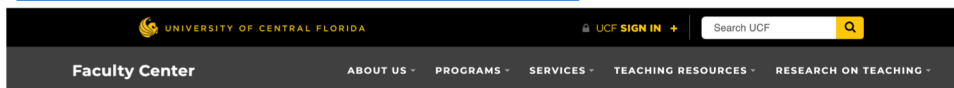# SoTL Online Resources

University of Central Florida Faculty Center
https://fctl.ucf.edu/research-on-teaching/getting-started/

USG SOTL Resources

The USG office (Denise and Jeff) and the institutional educational development point persons are also great resources, take advantage!

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