Strategies in Scholarship of Teaching and Learning

Alison Jolley (AJ), Emily Scribner, and Sarah Bean Sherman
University of British Columbia, Department of Earth, Ocean and Atmospheric Sciences
July 16, 2018
Lawrence, Kansas
Learning Objectives:

By the end of this workshop, you will be able to...

1. Identify research questions in geoscience teaching and learning.
2. Compare the scholarship of teaching and learning (SoTL) to geoscience research.
3. Investigate methods commonly used in SoTL.
4. Develop a plan to investigate a research question in geoscience teaching and learning.
Schedule

• Research questions in geoscience teaching and learning
• Compare SoTL to geoscience research

________________________ 10-minute break  ___________________________

• Jigsaw: data collection and analysis
• Research plans
• Debrief and resources
What is SoTL?

• Research on one’s own teaching practice
• Often course- or context-specific
• Ideally leads to self-reflection, improved teaching practices, and improved student learning
• Evidence-based conclusions that have broader applications and could serve as a model for others
Identify a Research Question in Geoscience Teaching and Learning

Questions you might want to consider:

• What does teaching mean to you?
• What do you value in teaching?
• What do you want to know about your teaching?
• What would count as evidence that those values in fact show up in your teaching?
Compare Approaches to SoTL and Geoscience Research

• Apples to oranges, or apples to apples?
SoTL Methods

• Jigsaw activity to learn about pre-post content assessments, classroom observations, interviews/focus groups and perception surveys
Develop a Plan to Investigate a Research Question in Geoscience Teaching and Learning

• Choose one of the research questions you came up with before the break.
• Create a research plan to investigate it.
Questions to consider:

• What is/are the method(s) you might choose to investigate your question and collect that evidence?

• Who will be involved in the process (i.e.: students, other instructors, self, etc.)?

• Where will the research take place?

• How long will the research take?

• How will you present your findings?

• What do you think the value of this research is to the instructor?

• What do you think the value of this research is to others if you were to expand this project?
Learning Objectives:

By the end of this workshop, you will be able to...

1. Identify research questions in geoscience teaching and learning.
2. Compare the scholarship of teaching and learning (SoTL) to geoscience research.
3. Investigate methods commonly used in SoTL.
4. Develop a plan to investigate a research question in geoscience teaching and learning.