

The Mechanics of the Scholarship of Teaching and Learning (SoTL) in Economics: A Practical Introduction

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What is Scholarship of Teaching and Learning?

- Systematic, evidence-based inquiry on teaching and learning:
 - Research in economic education: “classic” research papers on education.
 - Economic content: economic issues that may affect teaching.
 - Economic instruction: pedagogy and materials.
 - Other information: about economists.
- Goals: improve student learning and share outcomes of student learning; share specific materials, activities, pedagogy.
- Publications tend to be reflective, grounded in theory and pedagogy.

Why SoTL?

- **Improve Learning**
 - Evidence-based practice
 - Tailored pedagogy
- **Reflective Teaching**
 - Intentional course design
 - Teaching as inquiry
- **Advance Your Career**
 - Strengthens teaching dossier
 - Recognized at some institutions
- **Contribute to Your Discipline**
 - Share best practices
 - Improve subject-specific learning
- **Influence Policy**
 - Guide curriculum and assessment
 - Support accreditation efforts
- **Build Community**
 - Collaborate across departments
 - Mentor others

Quantitative:

- Active collection: Pre/post-tests, RCTs
- Passive collection: LMS data, performance metrics

Qualitative:

- Interviews, open-response surveys, observations

Mixed Methods:

- Combine numeric data with student perspectives

Economists have a methodological advantage and can bring empirical tools from economics to the classroom!

Experimental and Quasi-Experimental

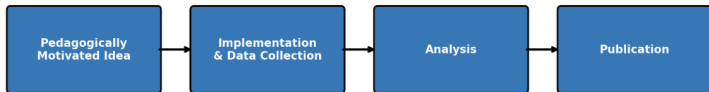
- RCTs: random assignment to treatment/control
- Natural experiments: exploit “external” changes
- Quasi-experimental: diff-in-diff approaches

Non-Experimental

- Descriptive statistics of outcomes and engagement
- Reflective practice and curriculum mapping
- Case studies and design-based research

Best Practices for SoTL

- Ground work in theory and/or pedagogy.
 - If you are making a new assignment, presumably you have a reason - think about this!
- Use transparent, rigorous methods (ex-ante, as much as possible!).
 - Ideally: implement your idea and collect data *at the same time*.
- Publish meaningfully - not just to publish.



Ethics and IRB

- **Respect for Persons:** Students are participants: protect autonomy, privacy, and confidentiality.
- **Informed Consent:** Let students opt in (or out). Be transparent about data use, risks, and benefits.
- **Avoid Coercion:** Instructor–student power dynamics can compromise voluntariness.
- **IRB Approval is (Usually) Required:** Even if you're researching your own class. Check with your institution's review board.
- **Dual Roles:** Be mindful of your role as both teacher and researcher. Keep assessment and research functions distinct.
- **Ethical Publishing:** Be clear about what data were collected for evaluation vs. for scholarship.

Ex-Ante Design and Rigor

- Plan SoTL work before the course begins.
- Build data collection INTO your teaching plan.
 - Like with any program evaluation, having a true comparison group and appropriately designed data leads to a better evaluation.
- Pre-register hypotheses and outcomes if possible.
 - Standards for Excellence in Education Research (SEER) recommends preregistration for any education study.
 - Easy to do: OSF.
- Align goals, assessments, and measurement strategies.
 - Think about how your teaching plan aligns with your research plan.

Institutional Structures and Support

- Tap into teaching centers and grant funding (if it exists...).
 - Are there grants that could support you?
 - Are there programs you can engage in to improve your teaching, that then might lead or suggest engaging in SoTL related to those changes?
- Form cross-disciplinary teams (you + an education researcher).
- Seek mentoring or offer it to colleagues.
 - Engage your students in the publication process!

Dissemination and Impact

- Publish in journals (e.g., *Journal of Economic Education*, *Applied Economics Teaching Resources*, etc.).
- Present at AEA, AAEA, disciplinary conferences.
- Apply results to course design and department policy.
 - Engage in course design and redesign.
 - Offer support in curriculum mapping and design.
- Help build a culture of evidence-based teaching; ask why do we do what we do & can we do better?

Final Thoughts

- SoTL turns curiosity into improved learning.
 - Remember that the end of the day is to share your learning about students to help others to improve their students' learning.
- Use economics tools to study teaching effectively.
 - Our econometrics training is an asset in the SoTL space!
- Treat your classroom as a lab for better learning.
 - But do it with respect, with students at the center.

Let's Talk!

Let's bring Hannah and Jerrod into this conversation. And here are a few questions to get you thinking ...

1. What does a SoTL study look like in your classroom? What does “credible identification” look like in a SoTL study in your classroom?
2. How can we design SoTL studies that are ex-ante rigorous? Is it useful to think of SoTL studies like field experiments?
3. How should we think about informed consent in a setting where we're both teacher and researcher?