

**Scholarship of Teaching & Learning**  
**Project NExT Panel**  
**2015 Joint Math Meetings**  
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## Scholarship of Teaching & Learning (SoTL)

- Where did SoTL originate?
- How it differs from several related concepts

### Examples

- Teaching can generate SoTL questions
- 3 types of SoTL investigations (a SoTL taxonomy)

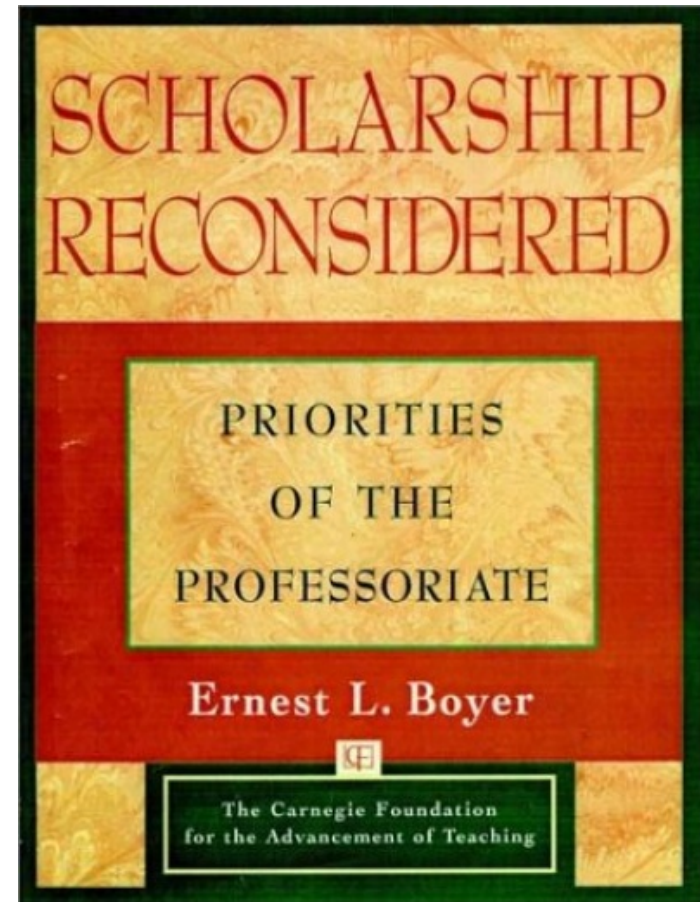
Link to a resource sheet for doing SoTL and going public

## Ernest L. Boyer

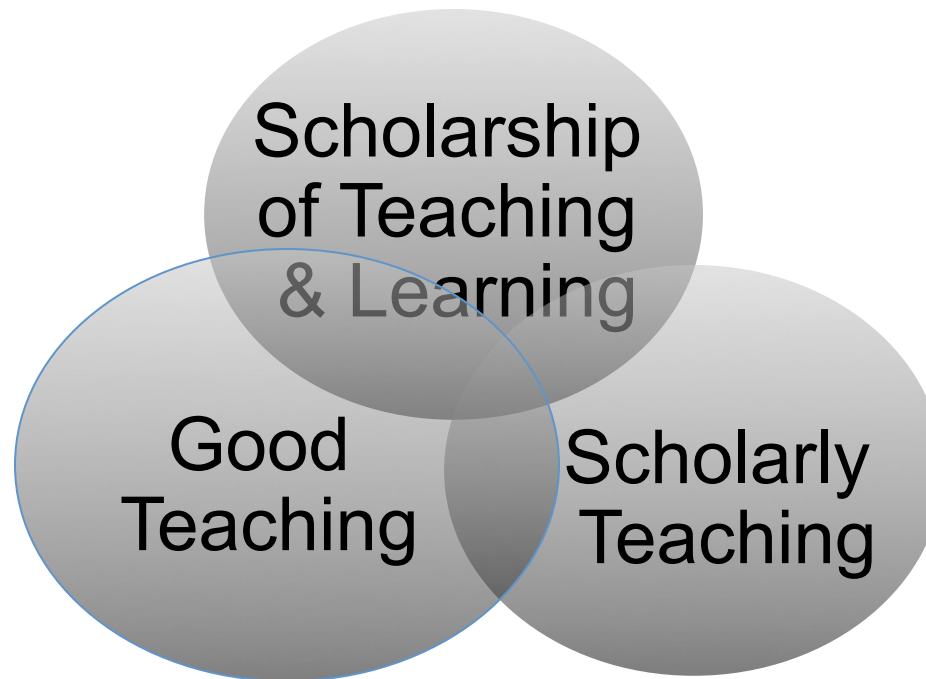


## Four Scholarships

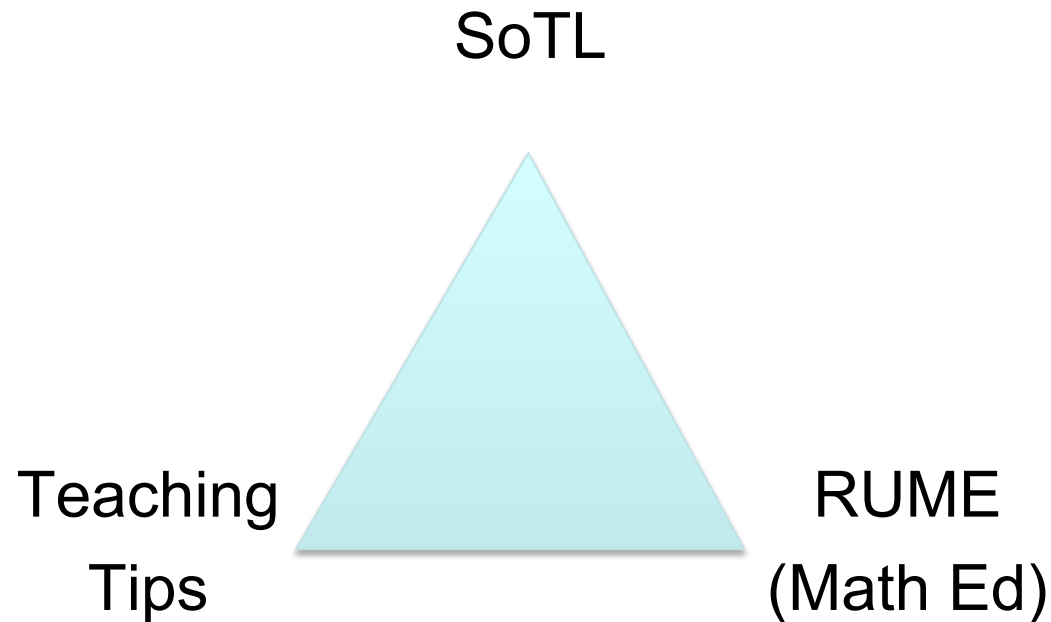
- Discovery
- Integration
- Application (Engagement)
- Teaching (and Learning)



1990



## Another clarification: SoTL vs. RUME



“A Shared Teaching Commons”  
(Huber & Hutchings, 2005)

A **Teaching Problem**  
(or situation) becomes



an **Invitation** to begin  
**Scholarly Inquiry**

## A Teaching Problem:

My students aren't as prepared for class as I would like.

My students aren't as prepared for class as I would like...

### **Try some interventions & gather data:**

- What if I give my students reading assignments?
- What if I give them reading questions for the assigned reading?
- What if I also ask them to generate their own questions after reading?

### **A new Teaching Problem:**

- How can I get them to ask better questions?

### **A different Type of SoTL Investigation:**

- What kind of questions are they asking now?



## Taxonomy of SoTL Investigations

### 3 types of SoTL investigations (Hutchings, 2000):

- **What works?** – Does this teaching method (e.g., giving reading assignments, reading quizzes, having students generate their own questions from the reading) work?
- **What is?** – This type seeks to understand something students are doing, not fix it. (e.g., What kinds of questions do students generate when reading? What do they do when they read? How do they use online homework systems? How do they approach a certain kind of problem?)
- **What could be? (AKA a vision of the possible)** – An opportunity presents itself and we document it or we examine a case where something really interesting/good happened? (example follows)

An investigation arising from an  
Opportunity, Passion or Special Case:

We add group projects on community  
issues to a gen ed math class and collect  
data to discover, **What could be?**

Or we simply observe a case where  
something really good happened, **a  
vision of the possible!**

## What is SoTL? My Definition

SoTL is the work faculty do when they

- apply their disciplinary knowledge to **investigate questions about teaching and learning**,
- draw conclusions **based on evidence gathered from students in a systematic way**,
- submit those conclusions to **peer review** and
- **make them available for others to build upon.**

See the resource sheet for ...

- An “algorithm” for undertaking a SoTL investigation
- A few concise and accessible references
- A list of many kinds of evidence, both qualitative and quantitative
- Links to lists of places to present or publish SoTL

For the slides and resource sheet go to

<http://myweb.lmu.edu/jdewar/NExT2015>

**Thanks and Questions??**

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