

The Problem

- How to assess new methods for increased student learning outcomes
- Tough to set up test & control groups
 - small class size, single section
 - yearly offering
 - different classes – VERY different students
 - change more than one thing (so far)

Assessing New Teaching Methods

Initial Ideas

- Pre- and post-concept tests to gauge student gains
- Consistent final exam questions
- Split single class section in two

Assessing New Teaching Methods

Different Approach

- Love for scientific method
 - wanted to compare with control group
 - not a bad idea for publishing, but don't plan to
- Modify & refine assessments
 - Are my students making learning gains with a particular method, period?

Assessing New Teaching Methods

Creating Assessment Tools

- Assessment based on type of knowing
 - Declarative (knowing what)
 - Procedural (knowing how)
 - Schematic (knowing why)
 - Strategic (knowing when to apply)
- Assessment to elicit specific task/response
- Does assessment evoke desired response, corresponds to scores?

Creating Assessment Tools

- Backward Design
 - Define big ideas/core tasks vs. “important to know how to do” vs. “worth being familiar with”
 - Define what would provide evidence of desired understanding and ability
 - Design assessment tools to provide evidence
 - Design lecture/classroom to promote results
- Six facets: Explain, Interpret, Apply, Perspective, Empathize, Self-knowledge

Assessing New Teaching Methods

Creating Assessment Tools

- Katie's assessment goals
 - Less exam focused, more projects + activities
 - More conceptual focus
 - More forethought