Well, *THAT* Didn't Work. How Purposeful, Systematic and Continuous Improvement Has Kept Me from Throwing the Baby Out with the Bathwater (and other ways it has affected my teaching):

Perspectives on Effective Teaching
Lee Schulman, President of The Carnegie Foundation for the Advancement of Teaching

"Scholarly teaching involves every one of us in a classroom, for outreach with students, retaining, electing, conducting discussions that we have read and have pedagogical teaching to the scholarship of teaching."

Yikes!!!
Systematic?!!!
If it doesn’t work, throw it out...
right?
101 Teaching Exemplars:

- process of becoming an effective teacher in accounting is an ongoing journey of continuous improvement

- willingness/ability to seek advice and guidance from others is an important developmental aspect of becoming an effective teacher
6 Cook Prize Recipients:

- The process of becoming an effective teacher in accounting is an ongoing journey of continuous improvement *as informed by critical self-reflection*.

- Willingness/ability to seek *and share* advice and guidance from others is an important developmental aspect of becoming an effective teacher.
My journey....
Self-reflective inquiry by faculty in the classroom to improve:

- Reasons for using certain pedagogy (theoretical constructs)
- Understanding of pedagogy
- Understanding of classroom environment and context of pedagogy

What is action research?

Carr and Kemmis, 1986
What is action research?

Or, more simply:

Action research is a practical way to look at one’s own work to see if it is as one would like it to be and allows one to continue developing one’s work.

McNiff, 2002
Me, me, me....it’s all about me:
My teaching,
My classroom environment,
My effectiveness

Narcissus by Caravaggio
Characteristics of Action Research

- researcher’s practice is subject of research
- qualitative and participative
- systematic critical self-reflection
- action (intervention) + research
- cyclical

- (many say sharing and peer review important, too)
Ongoing transformation in direction of values

Values

Practices
Example -

- 2 large lecture classes
- ≈ 840 students/various majors
- Lab sections
Example -

**Context**

*My values:*

- Provide environment conducive to learning
- Facilitate student learning within that environment
Example -

**Context**

**Rationale:**

- Work of learning must be done by students themselves – I provide environment, activities, resources, guidance
Reflection
(observing and documenting)

- current classroom environment
- current practices
Inconsistencies?

Values

Practices
Inconsistencies?
Inconsistencies?
Inconsistencies?
Inconsistencies?
Inconsistencies?
Inconsistencies?
Inconsistencies?
Seven Principles for Good Practice in Undergraduate Education*

- Encourage student-faculty contact.
- Encourage cooperation among students.
- Encourage active learning.
- Give prompt feedback.
- Emphasize time on task, or efficiency in getting the task done.
- Communicate high expectations.
- Respect diverse talents and ways of learning.

*Gamson and Chickering, 1991
Reflection
(based on observing and documenting)

*What do I want to change, and why?*

- Move away from rote learning and memorization
- Involve students (individually) even more
Example - Intervention
(planning for change)
Example -

Theoretical Constructs
(Based on pedagogical theory, what effect should this have – will it move practices closer to values?)

- Make lectures more engaging.
- Provide immediate feedback to instructor to students
- More effectively reinforce key concepts, helping students to build on previous knowledge and draw connections to new material.
**Seven Principles for Good Practice in Undergraduate Education**

- Encourage student-faculty contact.
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*Gamson and Chickering, 1991*
Example -

**Initiate Intervention**

- Participation points rather than graded questions
- MC questions only
Which of the following describes the matching principle?

A. Assets = liabilities + owner’s equity

B. For every entry on the left side of the accounting equation, there must be an equal entry on the other side of the equation (or an opposite, but equal, entry on the same side of the equation)

C. A company must match its revenues with the costs (expenses) of earning those revenues

D. A company must match a source document with each transaction.
Example -

**Observation and documentation**
(evidence of ongoing transformation in direction of values)

**Triangulation**

- Observation during semester
- Exam results
- Course evals at end of semester
- University on-line questionnaire after final exams
Evaluate and reflect

- Technical issues
- User issues
- Unchanged exam scores
- Survey issues
- Survey results
- Contrast with course evals
Evaluate and Reflect

- many technical issues resolved by clicker company
- changes could address user problems
- defer judgment on exam scores
- correct survey problems
- course evals gave some hope
Example -

Positive Course Eval Feedback about clickers

• allowed more participation and engagement in the large class,

• helped maintain interest and focus,

• provided immediate feedback to both the students and the professor.
Negative Course Eval Feedback about clickers

- the cost of the clickers,
- unfairness
Ongoing transformation in direction of values

Values
Practices
Example -

**Initiate first change**

- Implement corrections
- Add graded components
- Problems in addition to MC questions
- Add question sequencing
Between-semester “Heads-up” –

1. Clicker company released new update
2. Updated classroom software
Yikes!

“Pay no attention to that man behind the curtain...”
Example -

Initiate revised first change

- Implement corrections
- Add graded components
- Add problems to MC questions
Example - Observation and documentation (evidence of ongoing transformation in direction of values)

Triangulation

Observation during semester
Exam results
Course evals at end of semester
Paper questionnaire at end of semester with course evals
Example -

Evaluate and reflect

- Technical issues, but much fewer
- Fewer user issues
- Slightly improved exam scores
- Survey results
- Supported by course evals
Example -

**Evaluate and Reflect**

- many technical issues resolved
- changes addressed most (not all) user problems
- defer judgment on exam scores
- corrected survey problems
- course evals give more hope
Example -

Positive Course Eval Feedback about clickers

- enhanced the classroom environment and student learning
- helped students focus
- provided immediate feedback
- multiple choice questions resembled exam questions
- showed how well others in the class understood the material, and provided moral support when they and others didn’t fully grasp the topic at hand.
Negative Course Eval Feedback about clickers (but much fewer)

- confusion - clicker registration,
- cost of the clickers,
- inability to get points or participate when clickers were not working,
- inability to get points or participate in situations that they could influence on their own,
- ability of other students to get points for wrong answers and with students answering for their missing friends.
Evaluate and reflect

- Difficult to compare (different survey techniques)

- Survey results
  - more enjoyment
  - less time spent waiting for clicker system
  - class more interesting with variety of questions
  - helped students learn better
  - helped focus class
  - some continued frustration
Example -

Evaluate and reflect

- User issues continued, but more training can help
- Slight improvement exam scores – trend?
- More consistency between observations, surveys, and course evals
Ongoing transformation in direction of values

Values

Practices
Example -

Initiate second change

- More student training
- FAQ section on Blackboard site
- TAs stationed around room during questions
- Begin to monitor exam trends
- Add to survey

.... and so on.
observe and document phenomena in existing setting
initiate first change
observe and document effect of first change
observe and document effect of modified change
amend plan again
Initiate another modified change...
...and so forth

evaluate and reflect on effect of modified change
observe and document effect of modified change
initiate modified change
amend plan
evaluate and reflect on effect of change

reflect on inconsistencies between values and practices
plan for change
Initiate change
observe and document effect of change
amend plan again
Initiate another modified change...
And now for the peer review part.