

Teaching Teachers:
Drawing on Research to Enhance Faculty
Approaches to Teaching

Reinvention Center Conference
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Searle Center
for Teaching Excellence
ADVANCING UNIVERSITY LEARNING

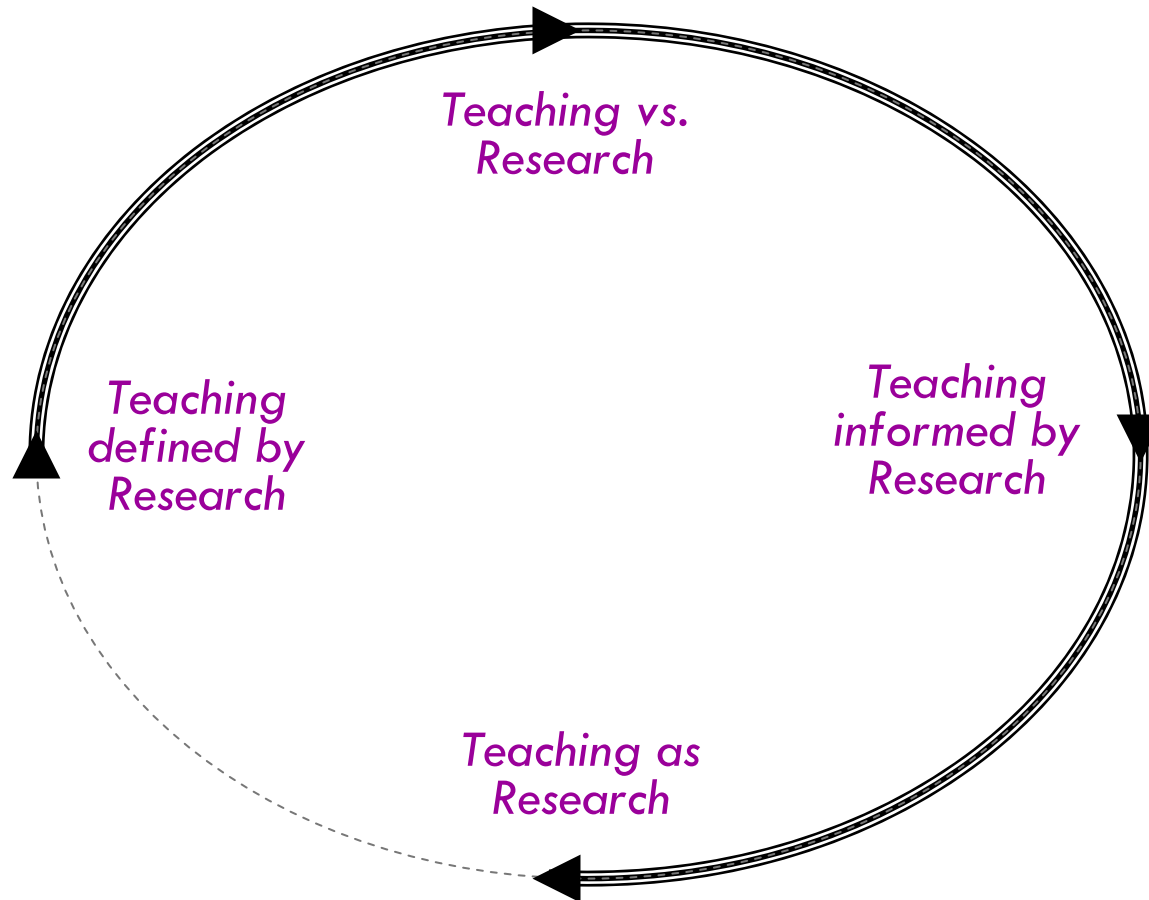


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Brief Objectives

- To share a research-characterized framework for engaging in faculty development of teaching
- To share some findings from research on learning, teaching & faculty development
- To provide some conceptual frameworks for discussion and reflection
- To come up with five recommendations for the conference

Faculty Development Cycle





Teaching Defined by Research

Models of Teaching

The Transmission Model

The intention is to get the course content *out* (and hopefully in): to transmit it to students. The implicit assumption is one-way and linear, of teaching as monologue: teaching causes learning.

The Engaged Model

The aim is to share the course content: to engage students in reconstructing the material themselves. The assumption is of teaching as dialogue: teaching is a by product of learning.

Improving Teaching: How do faculty Understand Improvement?

Model	Focus of Improvement
Transmission: Improving Teaching	<ul style="list-style-type: none">• Improve quality/quantity of content• Improve structure/organization of content• Acquire/increase experience of teaching• Expand practical teaching strategies/tips
Transitional	<ul style="list-style-type: none">• Develop teaching strategies which students perceive as working
Engagement: Improving Learning	<ul style="list-style-type: none">• Develop ways of improving students learning outcomes• Transform ones very idea/understanding of the nature of teaching as engaging students in learning

Aligning Teaching Around Learning

Questions

1. What **learning** outcomes do you want your students to achieve, (intellectual, social practical, and personal) as a result of taking your course?
2. How will your course help your students achieve these **learning** outcomes?
3. How will you know if the students on your course have achieved these **learning** outcomes?
4. How will you know if and how your teaching has contributed to your students' **learning** outcomes?



Teaching vs Research

Teaching vs Research

(Incompatibility Thesis)

Teaching

- Teaching – private
- Assessing teaching seen as problematic
- Teaching reputation is local: within department or institution;
- Status: nominal relationship to promotion, tenure, financial rewards
- Time: reduces time for research

Research

- Research – public
- Assessing research less problematic.
- Research reputation transcends institution, country etc.
- Status: significant relationship to promotion, tenure, financial rewards
- Time: reduces time for research

Research, Teaching and Learning

(A Compatibility Thesis)

Practice

Goal/Aim

Research:

The advancement of learning and knowledge of faculty and peers at *cutting edge* (Society)

Teaching:

The advancement of learning and knowledge of students and peers at *cutting edge* (Student)

(Light, G & Cox R. 2001)

Some Implications For Teaching

Academic Context

- Rivalry of Learning
- Power (and Ethics) in Learning

Teaching

- Teacher as Master Learner in the Discipline

Learning

- Student as Deep ('Cutting Edge') Learner

Learning Environment

- Problem-focused
- Research integrated
- Peer rich



Teaching Informed by Research

Student Approaches to Learning

Deep Approach

Intention - to understand ideas for yourself

Transforming by

- Relating ideas to previous knowledge and experience
- Looking for patterns and underlying principles
- Checking evidence and relating it to conclusions
- Examining logic and argument cautiously and critically
- Becoming actively interested in the course content

Surface Approach

Intention - to cope with course requirements

Reproducing by

- Studying without reflecting on either purpose or strategy
- Treating the course as unrelated bits of knowledge
- Memorizing facts and procedures routinely
- Finding difficulty in making sense of new ideas presented
- Feeling undue pressure and worry about work

Strategic Approach

Intention - to achieve the highest possible grades

Organizing by

- Putting consistent effort into studying
- Finding the right conditions and materials for studying
- Managing time and effort effectively
- Being alert to assessment requirements and criteria
- Gearing work to the perceived preference of teachers

Student Conceptions of Learning

A Increasing ones Knowledge

B Memorising

REPRODUCING

C Applying Facts & Procedures

D Understanding

E Seeing something in a Different Way

TRANSFORMING

F Changing as a Person

Teaching as Research

Re-characterize Teaching

- **Re-conceptualize teaching problems or questions in the same way as research questions: as intellectual challenges.**
- **Explore the questions and implications which ones own disciplinary research may have for students and teaching. Draw upon one's own experience of learning in research – not necessarily ones experience as an undergraduate.**
- **Engage in research and evaluation of teaching and student learning beyond student ratings and experience. And incorporate results into their teaching.**
- **Take risks, be curious, go to the literature; conduct studies, observations, experiments; collaborate with colleagues, students; present; publish, disseminate.**
- **Challenge students to engage in a culture of inquiry and research activity – even on their learning (meta-learning).**

Teaching: Integrating Research

Questions

1. What learning outcomes do you want your students to achieve, as a result of taking your course?
2. How will your course help your students achieve these outcomes?
3. How will you know if the students on your course have achieved these outcomes?
4. How will you know if and how your teaching has contributed to your students' learning outcomes?

Focus

1. **Focus on the quality as well as the content of student learning outcomes. How does a master or expert learner engage the material?**
2. **Focus on learning activities that foster inquiry approaches, provide research opportunities for students to engage in master/expert experiences of learning.**
3. **Provide opportunities for student self and peer assessment, including the development of assessment criteria.**
4. **Critically evaluate and research the impact which teaching has had on both student and ones own learning.**

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