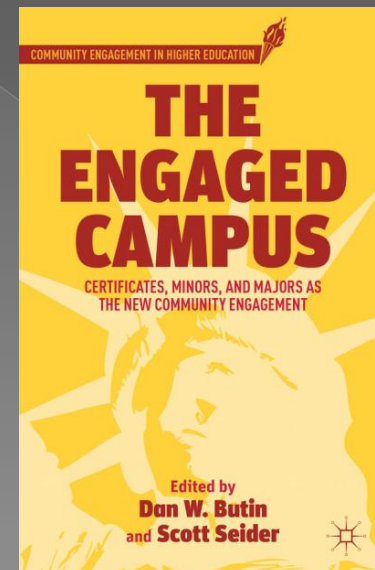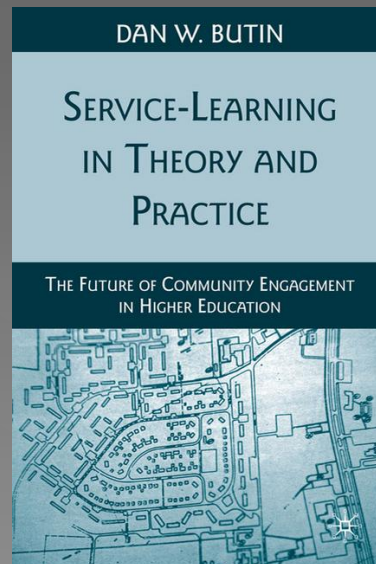# Danger! Teaching Ahead: A Vision for the Scholarship of Teaching and Learning

Dan W. Butin, Merrimack College
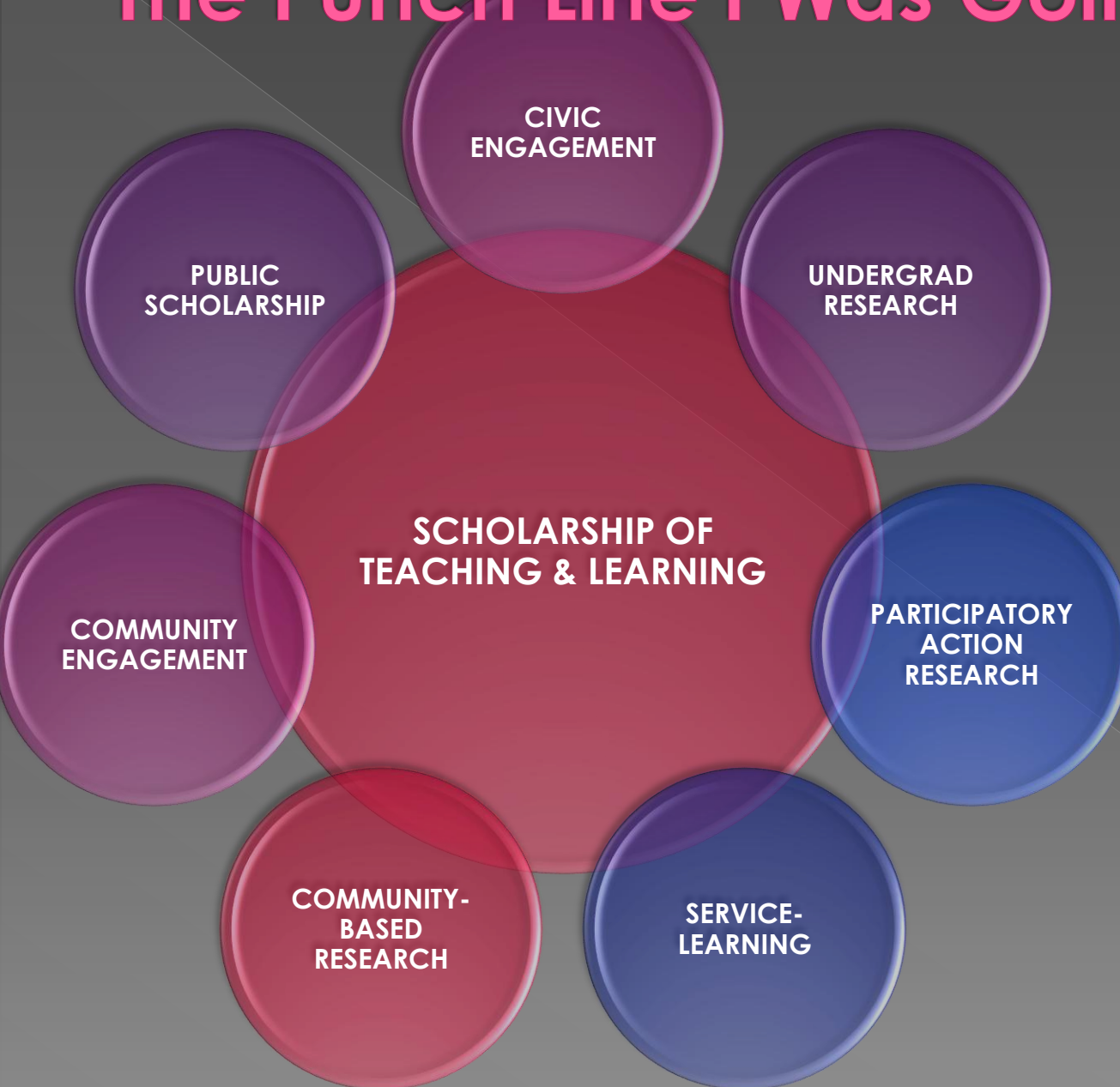
Sixth Annual Conference on Teaching and Learning
Oakland University, Rochester, MI
May 9-10, 2012

The Story I Was Going to Tell...

- LECTURING AS WORST FORM OF TEACHING

- TEACHING AS "DANGEROUS"

- DEWEY: NO TEACHING WITHOUT LEARNING

- POWER OF PLACE-BASED EXPERIENTIAL LEARNING

The Punch Line I Was Going to Give...

CIVIC ENGAGEMENT

UNDERGRAD RESEARCH

PUBLIC SCHOLARSHIP

SCHOLARSHIP OF TEACHING & LEARNING

COMMUNITY ENGAGEMENT

PARTICIPATORY ACTION RESEARCH

COMMUNITY-BASED RESEARCH

SERVICE-LEARNING

TEACHING AS THE QUESTION; NOT THE ANSWER

CONTRA THE INSTRUMENTALIZATION OF HIGHER EDUCATION

TEACHING AS TEXT

A VISION FOR THE SCHOLARSHIP OF TEACHING AND LEARNING

My Talk Hijacked by MITx…

- LAUNCHED THIS SPRING
  - › 6.002X CIRCUITS & ELECTRONICS
  - › 120,000 SIGNED UP; 20,000 STILL ENROLLED
- MOOC (MASSIVELY OPEN ONLINE COURSE)
  - › FULLY AUTOMATED
  - › SCALABLE

Web 2.0…(But Still Learning 1.0)

- **Open CourseWare Movement**
  - e.g., MIT – 1 million visitors/month
- **Wikipedia; Khan Academy**
- **New Charter University; StraighterLine**
  - $99/month; transferable credit through ACE; CAEL
- **Western Governors University**
  - 25,000 students; all online degrees; unbundling of curriculum, instruction & assessment

VOLUME   VARIETY   VELOCITY   VARIABILITY
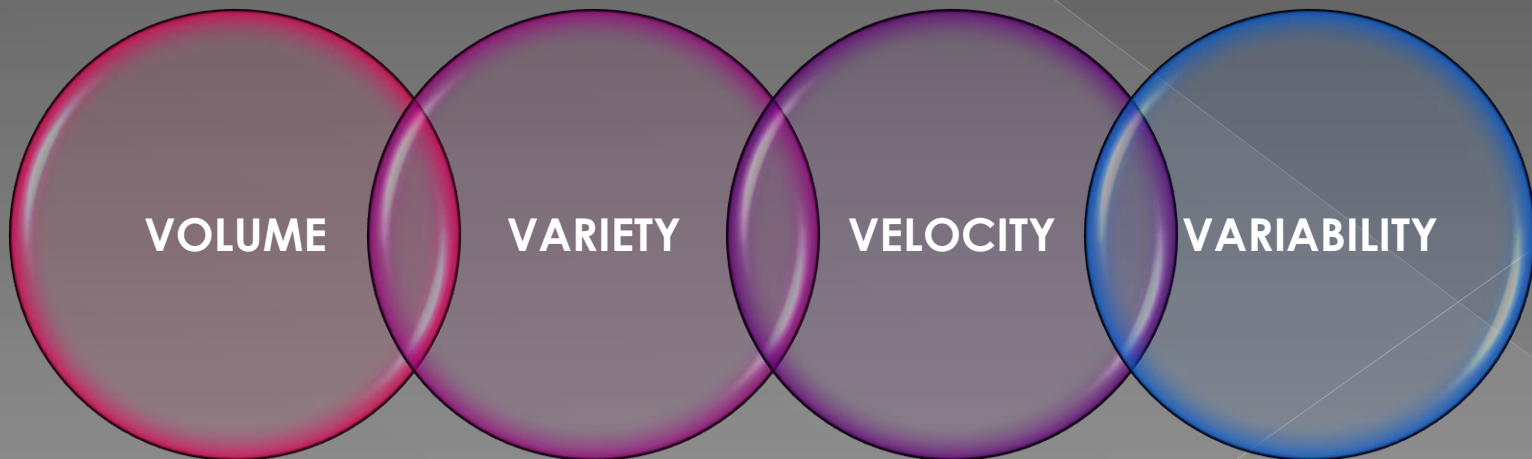
Why MITx is Different

- **Undermines the Credentialing Society**
  - Singular unit of measurement
  - Exchange value
- **Learning Analytics**
  - Adaptive testing
  - Intelligent Tutoring Systems ("interaction granularity")
  - Natural Language Processing (latent semantic analysis)
  - "Big Data"
- **Baumol's Cost Disease**

MITx *versus* "Higher Education"

- **STUDENTS (20 MILLION)**
  - DEMOGRAPHICS
    - 42% ATTEND COMMUNITY COLLEGES; <25% ARE "TRADITIONAL"
  - LEARNING
    - 50% REQUIRE SOME REMEDIAL EDUCATION; COLLEGE AS INSTRUMENTAL (I.E. GET A JOB)
  - OUTCOMES
    - TIME TO COMPLETION (>150%); GRADUATION RATES (30% AA; 55% BA); INEQUITY ACROSS RACE, ETHNICITY & SES; ACTUAL LEARNING (CLA – "ACADEMICALLY ADRIFT")
- **FACULTY (1.7 MILLION)**
  - DEMOGRAPHICS
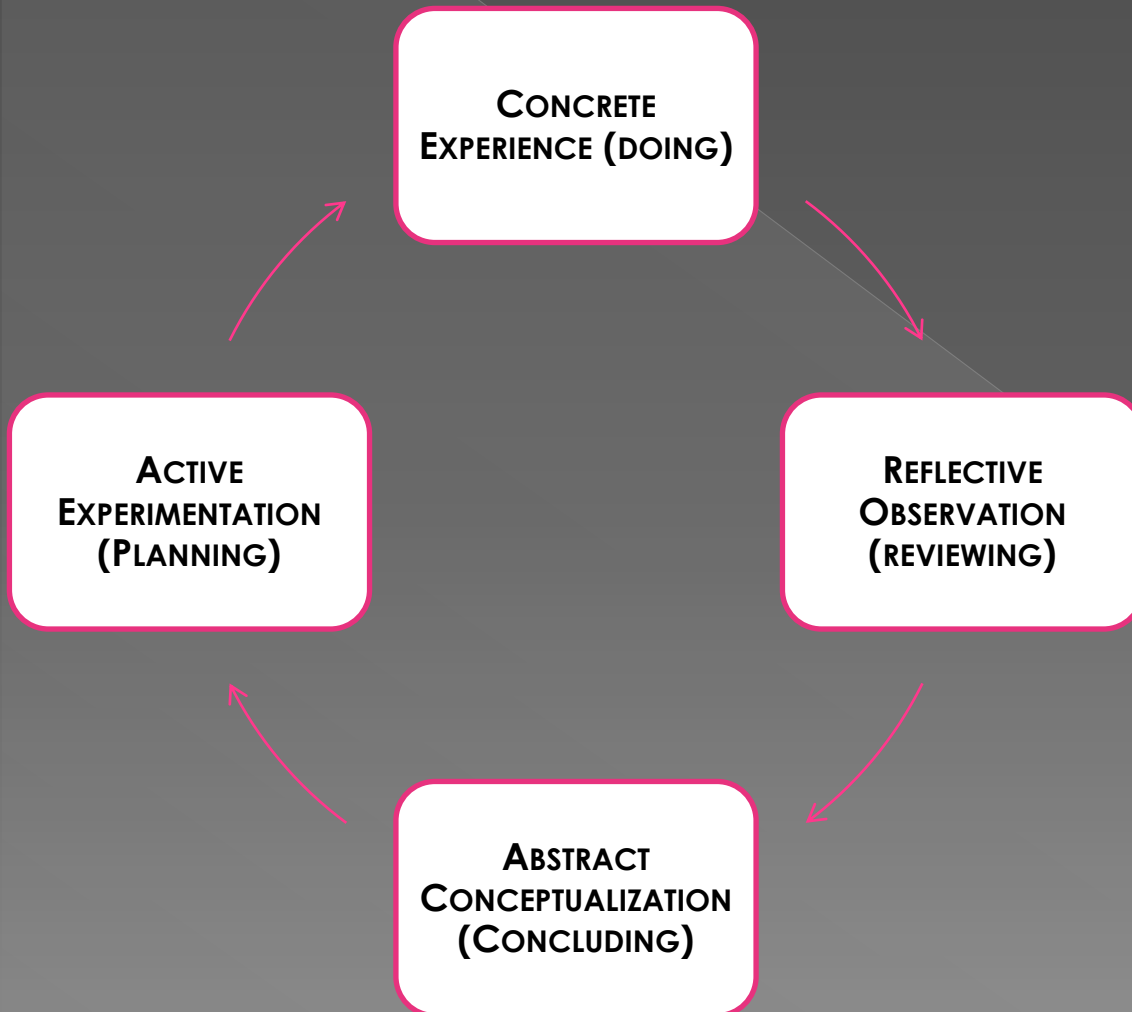   - 2/3 ARE NON-TENURE-STREAM
  - TEACHING
    - 83% USE LECTURING AS PREDOMINANT CLASSROOM PEDAGOGY
- **INSTITUTIONS (4,500)**
  - <2% ARE TRADITIONAL LIBERAL ARTS COLLEGES
  - 33% OF ALL STUDENTS TAKE ONLINE COURSES

The Future of MITx

Concrete Experience (doing)

Reflective Observation (reviewing)

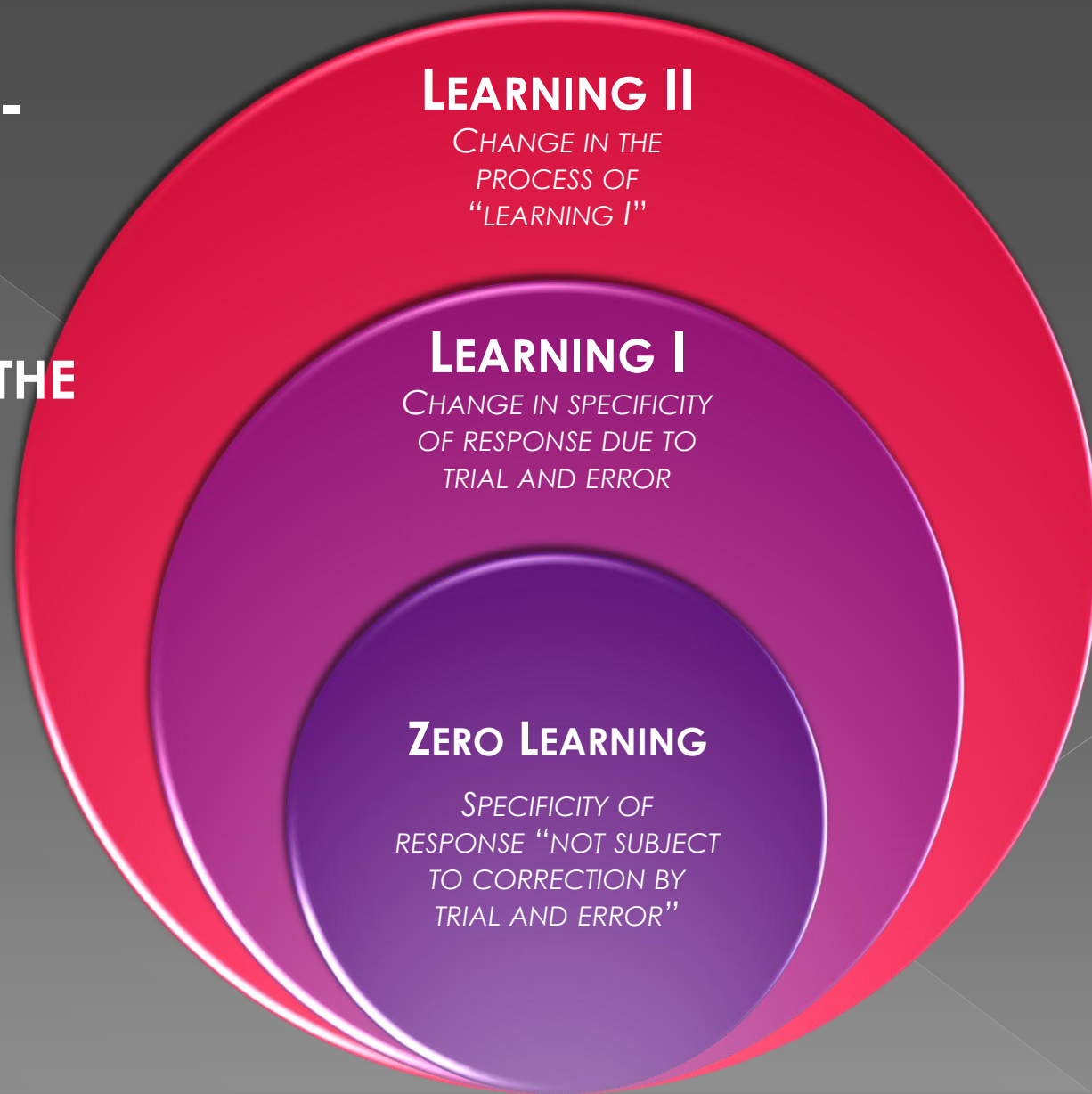**Abstract Conceptualization (Concluding)**

Active Experimentation (Planning)

- **Edx courses → humanities, social sciences, natural sciences**

- **"The mother of all moocs" → Wikipedia + Watson + Netflix**

- **All Feedback, All the Time**

The Limits of MITx

- BATESON & META-LEARNING
- BRITTLENESS
- "THE MAP IS NOT THE TERRITORY"

LEARNING II
CHANGE IN THE PROCESS OF "LEARNING I"

LEARNING I
CHANGE IN SPECIFICITY OF RESPONSE DUE TO TRIAL AND ERROR

ZERO LEARNING
SPECIFICITY OF RESPONSE "NOT SUBJECT TO CORRECTION BY TRIAL AND ERROR"

Dewey's "Moment of Doubt"

"Thinking begins in what may fairly enough be called *a forked- road* situation, a situation which is ambiguous, which presents a dilemma, which proposes alternatives…Difficulty or obstruction in the way of reaching a belief brings us, however, to a pause. In the suspense of uncertainty, we metaphorically climb a tree; we try to find some standpoint from which we may survey additional facts and, getting a more commanding view of the situation, may decide how the facts stand related to one another"

Moment of Doubt - Operationalized

- **NOVICE/EXPERT RESEARCH: DELIBERATE PRACTICE**
  - AGAINST AUTOMATICITY (EDGE OF CHAOS; ZPD)
- **SELF-CONSUMING PEDAGOGY**
  - ANTIFOUNDATIONAL SERVICE-LEARNING
- **TEACHING AS BRICOLAGE**
  - STANDARDIZATION OF PRACTICE (I-R-E SEQUENCES)
  - REPERTOIRE ENLARGEMENT (IMPROVISATIONAL STRATEGIES)

The Story I Now Can Tell…(Post-MITx)

- LECTURING AS WORST FORM OF TEACHING

- TEACHING AS "DANGEROUS"

- DEWEY: NO TEACHING WITHOUT LEARNING

- POWER OF PLACE-BASED EXPERIENTIAL LEARNING

A Vision for the Scholarship of Teaching and Learning

- TEACHING AS THE QUESTION; NOT THE ANSWER
- TEACHING AS TEXT

The Arrow and the Song

I shot an arrow into the air
It fell to earth, I knew not where,
For so swiftly it flew, the sight
Could not follow it in its flight.

I breath'd a song into the air
It fell to earth, I knew not where.
For who has sight so keen and strong
That it can follow the flight of song?

Long, long afterward in an oak
I found the arrow still unbroke;
And the song, from beginning to end
I found again in the heart of a friend.
~ Henry Wadsworth Longfellow