

Active Learning & Innovation

Leveraging Research, Not Rhetoric, in Pursuit of Deep and Flexible Learning



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Overview

- Introduction
- What is Active Learning
- Deep & Flexible Knowledge
- Active Learning & Assessment
- Innovation
- Conclusion

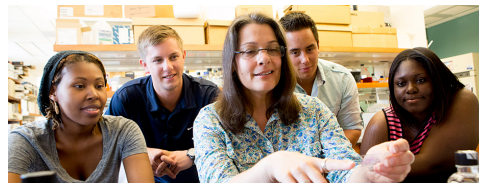


Active Learning is a Change in Perspective

https://www.youtube.com/watch?v=Weq_sHxghcg

Active Learning

Why active learning?
&
What is active learning?



Active Learning

- Barr, R., & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change* (Nov/Dec), 13-25.
- Teacher-centered instruction
- Student-centered instruction
- Learner-centered instruction
- Learning-centered instruction
- For the things we must learn in order to do them, we learn by doing them. -- Aristotle

Welcome to the deep end of the pool...



Search...

Home About IMPACT Contact

PURDUE IS ON A MISSION

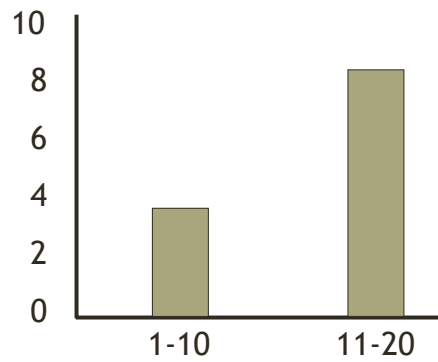
Do you want to be a part of it? Click below to learn more about us and what you can do. Purdue University



THE EXTRAORDINARY TEACHING PROJECT

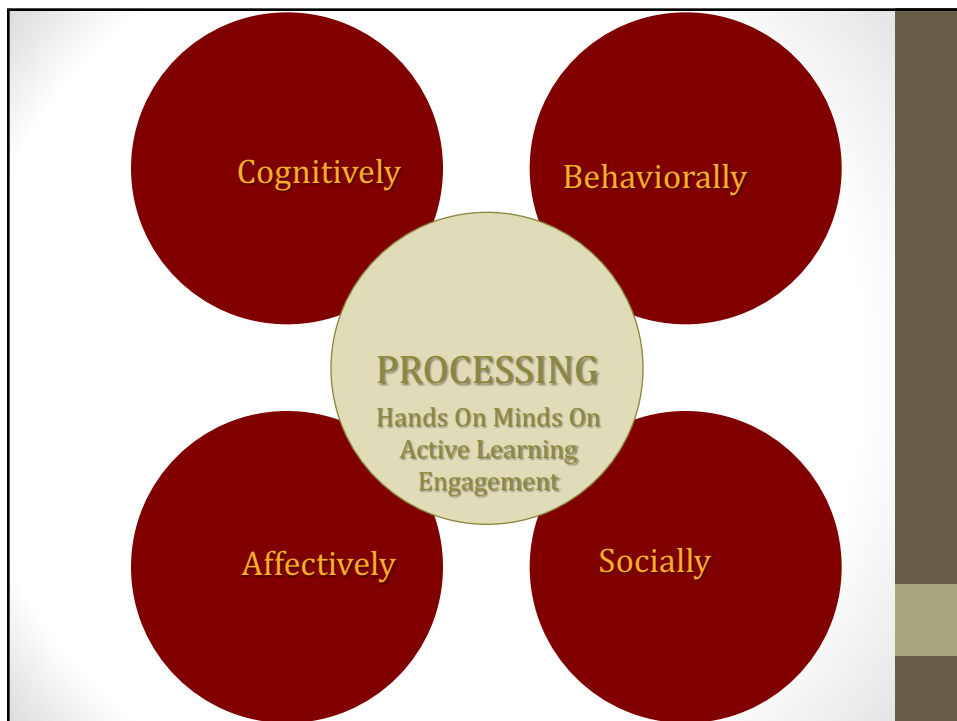
Inspiring and Supporting Extraordinary Teaching & Learning University of Iowa

Activity #2



Activity #2

- Meaningful Learning
 - Elaboration
 - Imagery
 - Self-Generation
 - Self-Reference Effect
 - Encoding Specificity
- Processing



The Need to be Clear

<https://www.youtube.com/watch?v=VSdxqIBfEAW>

Deep & Flexible Knowledge

1. Practice at retrieval
2. Learning through varied tasks
3. Learning for varied purposes
4. Learning at the principle level
5. Learning awareness and control

Active learning is a continuum.



2015 T & L Symposium

Instructional Strategies

- Student Presentations
- Semester Projects
- Low-Stakes Writing
- Reading Reflections
- Discussion Questions
- Self-Check Questions
- Group worksheets
- Field Research Activities
- Interactive Feedback Loops
- Practice (spaced/varied)

Teaching Approaches

- Community based learning
- Project-based Learning
- Flipped Classroom
- Blended Learning
- Inclusive Pedagogy
- Google Communities
- Team Teaching
- Hope & Grit Grading
- Gaming/Gamification
- MDA Framework

3 Levels of Active Learning

Instructional Strategies

One-Minute Paper
Durham College

Instructional Approaches

SCALE-UP
Univ of Minnesota

PM SCALE-UP
Virginia Tech

Instructional Authenticity

Amphitheatre
Virginia Tech

I have an idea...

3 Levels of Active Learning

Instructional Strategies

Cartooning
University of Iowa

Instructional Approaches

Flipped Classroom
NCSU

Instructional Authenticity

Professional Writing
Virginia Tech

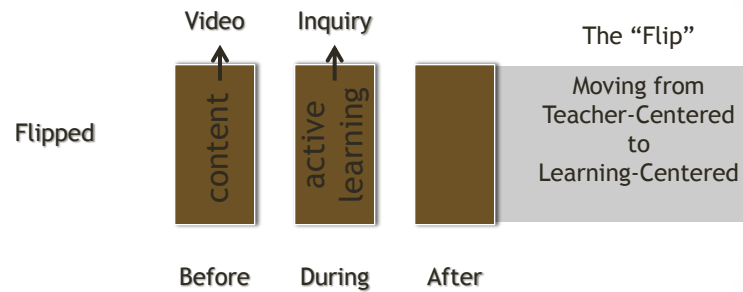
RISK

Deep & Flexible Knowledge

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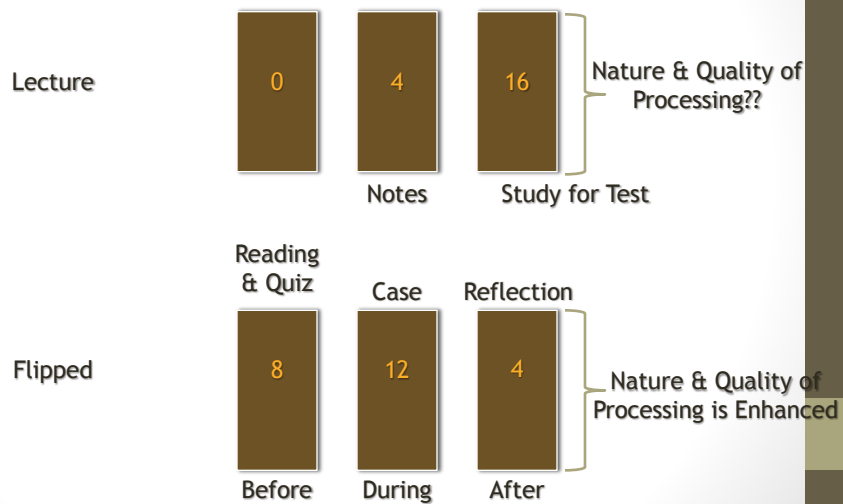
A Reminder...

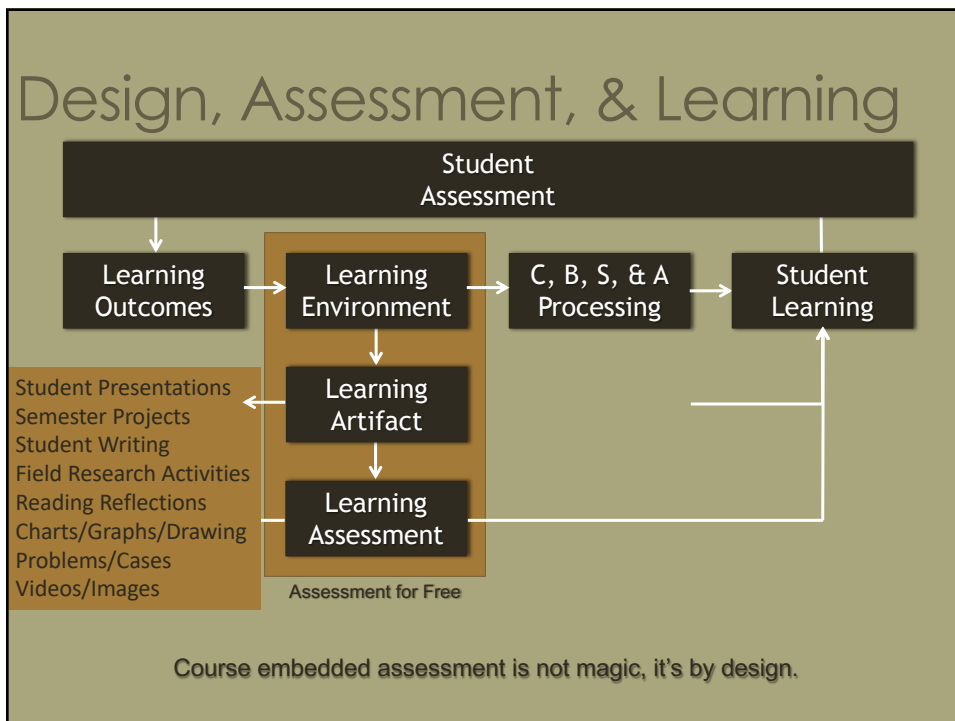
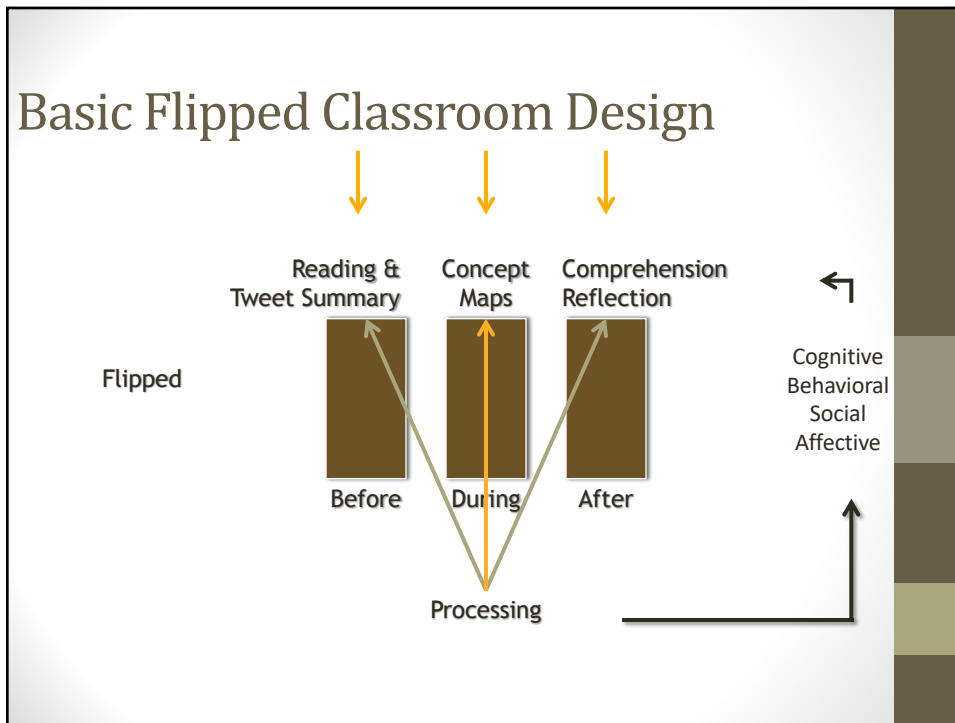
Flipping Basics



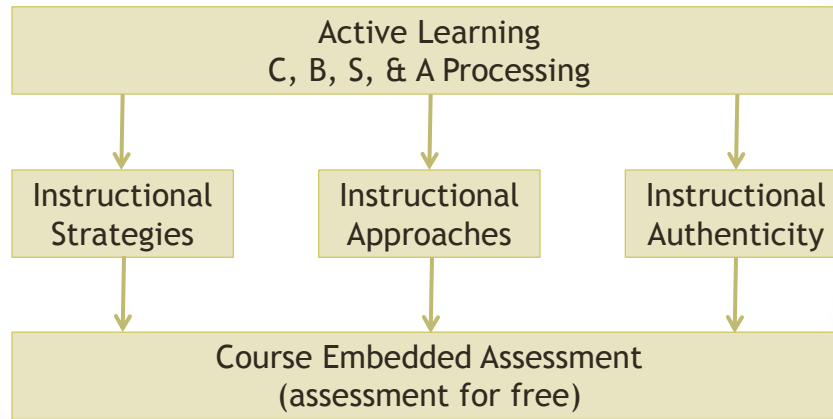
Learning is not magic, it's by design.

Lecturing versus Flipping





Review



Processing Matters

<http://www.teachertube.com/video/ma-and-pa-kettle-division-14983>

Note: The following 5 slides were not addressed in the presentation due to time.

Innovation

Innovation

- a different product, process, strategy, or approach that improves significantly upon the status quo.
 - *Jim Shelton, Assistant Deputy Secretary of the Office of Innovation and Improvement at the U.S. Department of Education*
- different *and* better

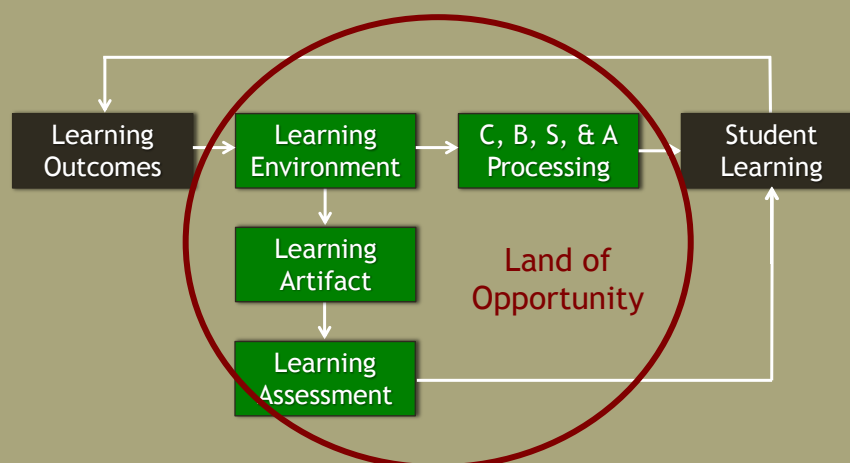
Educational Innovation

- Instructional practice
- Instructional assessment
- Class organization
- Text/content resource use
- Technology use/integration

Student Learning



Educational Innovation



Educational Innovation

- Individual Innovation
 - Bottom up
 - Narrowly focused
 - Course based
 - Institutional Innovation
 - Top down
 - Broadly focused
 - Curriculum based
 - Individual and Institutional Collaboration
- Opportunity
Exciting
Now

Active Learning Caveats

1. Remember the Past
2. Avoid Silver Bullets
3. Focus on Research Not Rhetoric

Change the World

<https://www.youtube.com/watch?v=SswMzUWOiJg>

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