Active Learning, Proactive Teaching, Deep and Flexible Knowing

Peter E. Doolittle
Director, School of Education
Professor, Educational Psychology
Virginia Tech • Blacksburg • Virginia

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Anticipation Guide

Directions: **Agree** or **Disagree** or **Edit**?

1. Anyone can teach.
2. Active or deep learning in students is fostered by note taking and discussions with fellow students.
3. Technology allows teachers to teach more powerfully, more efficiently, and with less effort.

perspective ☞

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Changing Perspective

Overview

1. Introduction
2. Learning Essentials
3. Design of Instruction & Assessment
4. Technology Integration
5. Conclusion

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Learning First

processing

words ☞

Rest Snore Sound

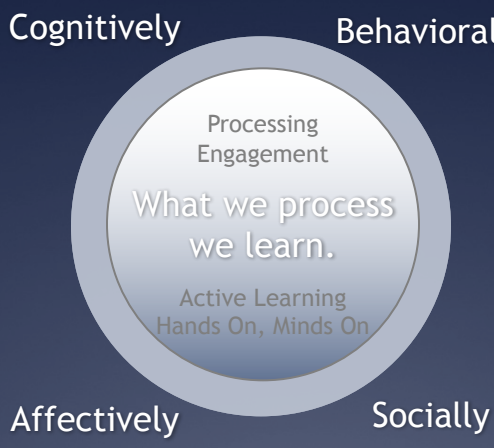
Tired Bed Comfort

Awake Eat Wake

Dream Slumber Night

What does the activity tell us?

1. Meaning is constructed during experience and reconstructed during recall.
2. Construction/reconstruction result from cognitive, social, behavioral, & affective processing.
3. Knowledge is organized.
4. When specifics are lost, meaning remains.
5. Strategies are used to function more effectively.
6. We can assess the effectiveness of our thinking.



cats ☞

Fostering Processing is a Challenge

6 Principles for Developing Deep and Flexible Knowledge

1. Learning through practice at retrieval
2. Learning through varied tasks and purposes
3. Learning at the principle level
4. Learning awareness and control (metacognition)
5. Learning in response to developmental feedback
6. Learning embedded in prior knowledge & experience

(Engle, 2006; Halpern & Hakel, 2003; Mariano, Doolittle, & Hicks, 2009; Wagner, 2006)

Learning First

example

25-Word Summaries

Fostering Deep & Flexible Knowledge

- Opportunity to engage in critical thinking and extract the essential meaning from a reading, lecture, video, movie, activity, or experience
- Summarize the meaning clearly and concisely, based on student's understanding, in 25 words or less.

25-Word Summaries

Grading: Each Chapter Summary Statement is worth 50 points and will be graded using the following criteria:

1. Structural Format — 10 pts
   a. Is the summary 25 words or less?
   b. Is the summary a coherent sentence, or sentences?
   c. Does the summary avoid a simple listing of concepts, terms, or themes?

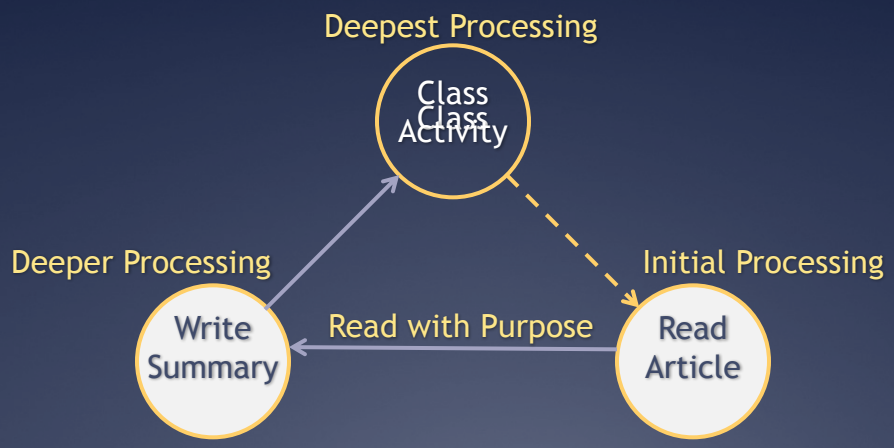
2. Clarity of Thought and Expression — 15 pts
   a. Are the ideas expressed well, well thought out, and integrated?
   c. Does every word in the summary have a meaningful purpose?
   d. Are correct grammar and syntax used?

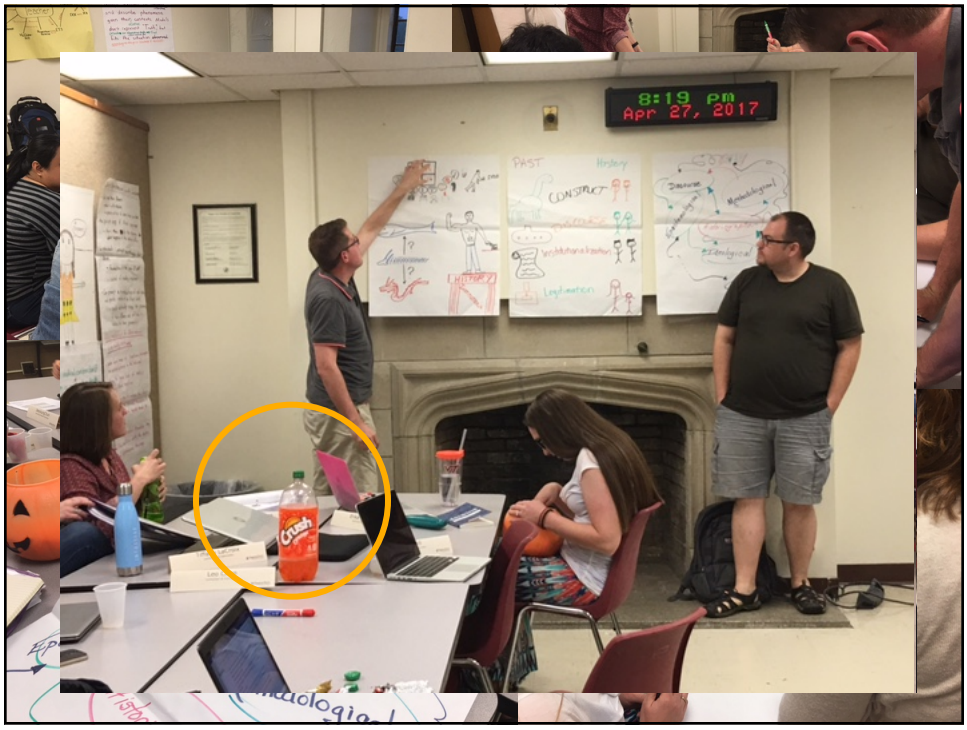
3. Delineation of Core Message — 25 pts
   a. Does the summary accurately reflect the reading's central or essential message?
   b. Are the reading's central or essential messages fully integrated?
   c. Does the summary reflect an understanding of the reading?

plus Feedback

with Dragon Dictate

25-Word Summaries



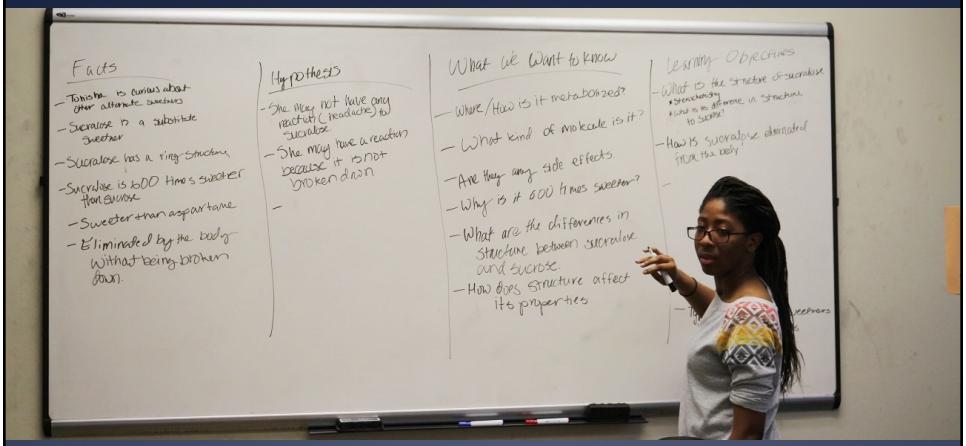


25-Word Summaries
In-class Summary + Visual Rep

- ✔ ✔ 1. Learning through practice at retrieval
- ✔ ✔ 2. Learning through varied tasks and purposes
- ✔ ✔ 3. Learning at the principle level
- ✔ ✔ 4. Learning awareness and control (metacognition)
- ✔ 5. Learning in response to developmental feedback
- ✔ ✔ 6. Learning embedded in prior knowledge & experience

(Engle, 2006; Halpern & Hakel, 2003; Mariano, Doolittle, & Hicks, 2009; Wagner, 2006)

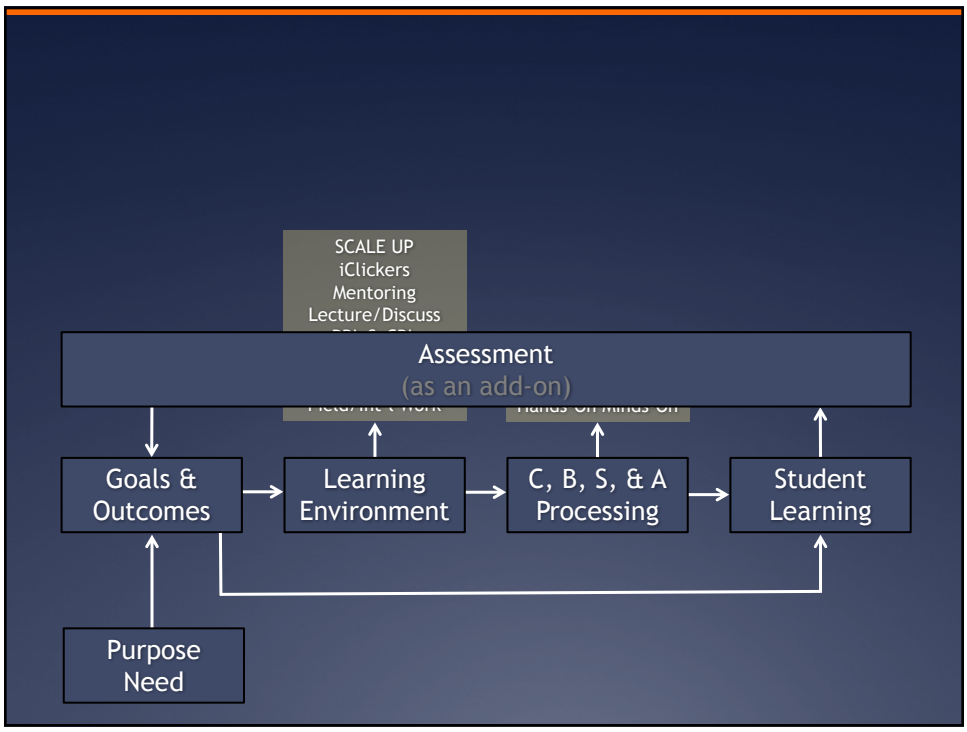
Design of Instruction & Assessment

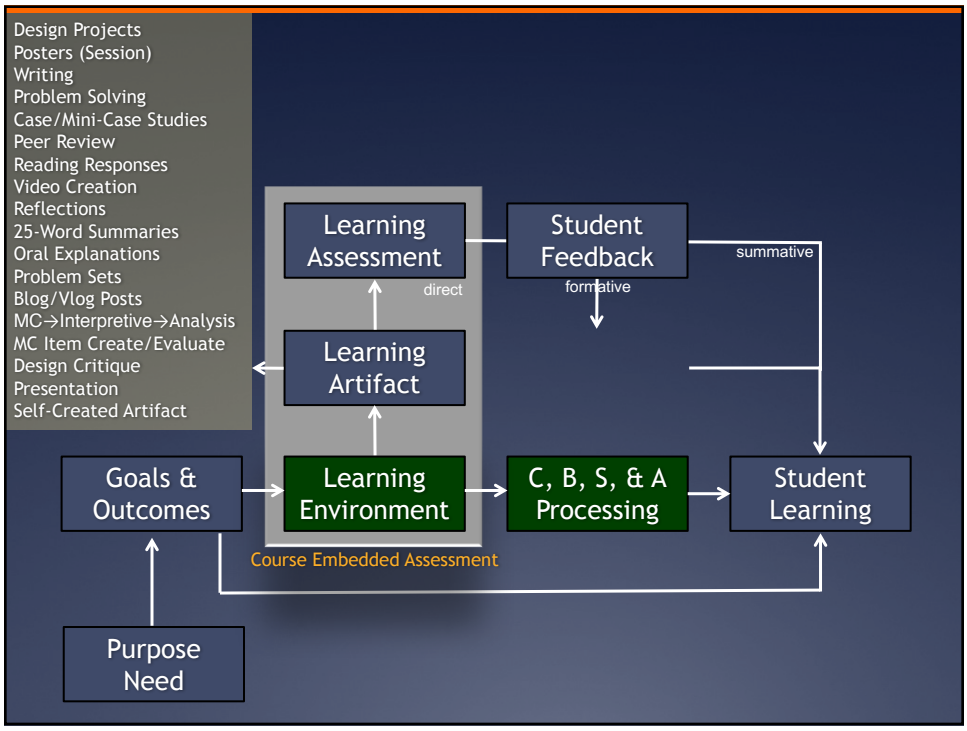


artifacts

clarity ☞

The Need for Clarity


SCALE UP
iClickers
Mentoring
Lecture/Discuss
Assessment
(as an add-on)
Goals & Outcomes
Learning Environment
C, B, S, & A Processing
Student Learning
Purpose Need


Design Projects
Posters (Session)
Writing
Problem Solving
Case/Mini-Case Studies
Peer Review
Reading Responses
Video Creation
Reflections
25-Word Summaries
Oral Explanations
Problem Sets
Blog/Vlog Posts
MC→Interpretive→Analysis
MC Item Create/Evaluate
Design Critique
Presentation
Self-Created Artifact
Learning Assessment
direct
Student Feedback
formative
summative
Learning Artifact
Goals & Outcomes
Learning Environment
C, B, S, & A Processing
Student Learning
Course Embedded Assessment
Purpose Need

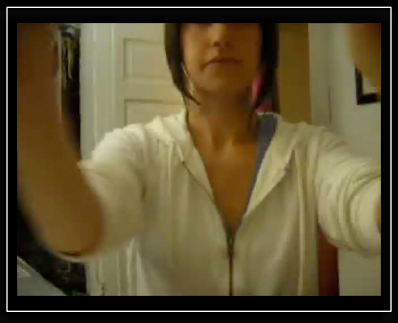
Oral Explanations

Learning Environment: Students create clear and coherently organized 10-15 minute videos that reflect the student's understanding of the current topic under discussion, plus an application to their lives.

Learning Artifact Processing: Students analyze and interpret readings, notes, and discussions; organize concepts and ideas; apply to a life issue; create an oral explanation.

Learning Assessment: Video are assessed using a scoring guide focused on organization, clarity of thought and expression, essential content explanation and application.

Oral Explanation: Human Learning



Oral Explanations

Grading: Each Oral Explanation is worth 100 pts and will be graded using the following criteria:

1. Organization — 20 pts
   a. are introductions and conclusions used effectively?
   b. do the expressed ideas follow a logical progression?
   c. are explanations and applications provided?

2. Clarity of Thought and Expression — 20 pts
   a. are the ideas expressed well, well thought out, and integrated?
   b. are there clear and logical transitions between ideas?
   c. are correct grammar and syntax used?

3. Essential Content Explanation — 30 pts
   a. does the content of the explanation accurately reflect the addressed constructivism?
   b. does the explanation explain, rather than just list, the main concept components?
   c. is the content of the explanation free from personal interjections?

4. Essential Content Application — 30 pts
   a. is a problem, issue, or situation explained clearly?
   b. are concepts from the texts and class used to address the cited problem?
   c. is the application thorough, meaningful, and appropriate?

Oral Explanations

1. Learning through practice at retrieval
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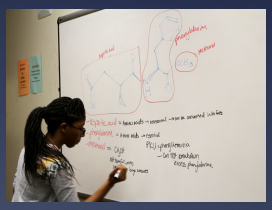
Technology Integration





design

risk ☞

Do it, now. Risk.

Technology Integration

Do it. Fix it. Try it.
Tom Peters & Bob Waterman
In Search of Excellence (1982)

Don't worry, be crappy.
Guy Kawasaki
Ex-Apple Engineer

Technology is neither good nor bad

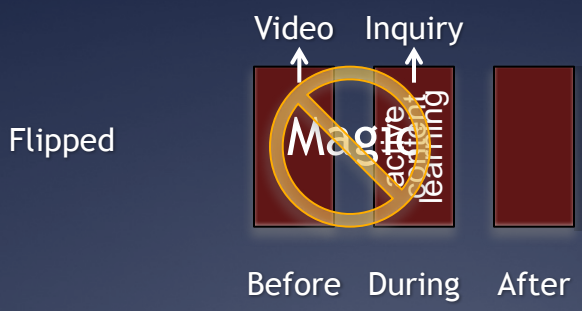
but using it makes it so.

6 Principles of Deep and Flexible Learning

Design of Instruction and Embedded Assessment

Flipping

Flipping Basics



The "Flip"

Moving from Teacher-Centered to Learner-Centered

Learning is not magic, it's by design.

Lecturing versus Flipping

	Notes	Study for Test	
Lecture	0	4	16

Nature & Quality of Processing??

	Online Tutorial & Problems	Case	Focused Reflection
Flipped	8	18	4
	Before	During	After

Nature & Quality of Processing is Enhanced

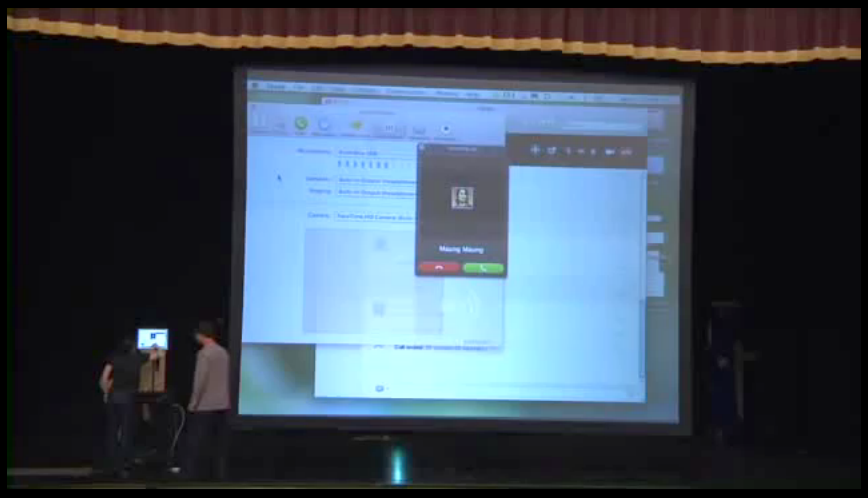
Flipping & Technology Integration

Before	During	After
Online Tutorial & Problems	Online Case	Focused Reflection
Content Video & Online Quiz	Concept Map	Blog/Vlog Post
Blog Reading & Summary	Skyped Speakers	Peer Feedback
Simulation Activity & Video Explanation	Image Analysis	Activity Evaluation

Flipped

skype ☞

Skype: Aung San Suu Kyi



Be Crazy

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