

2019 Professional Development Days  
Husson University

## Integrating Learning, Teaching, & Assessment

Fostering Deep and Flexible Learning

Twitter: @pdoopdo

Linked In: peter-doolittle

Web: PeterDoolittle.org

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

## Anticipation Guide

Directions: Agree, Disagree, or Edit each statement.

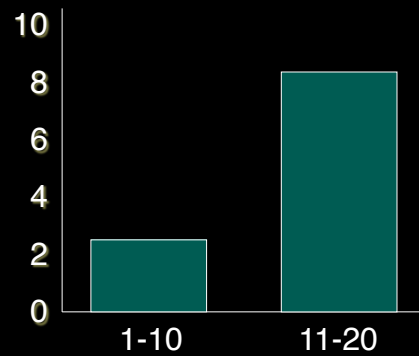
1. Anyone can teach.
2. Technology allows teachers to teach more powerfully, more efficiently, and with less effort.
3. Assessments should be designed to determine what students know and do not know.

# Clarity

# Learning and Memory I



## Learning and Memory I



## Learning and Memory I

- Meaningful Learning
  - Elaborative Learning
  - Imagery
  - Self-Generation
  - Self-Reference Effect
  - Encoding Specificity
    - State-dependent
    - Context-dependent
    - Transfer-Appropriate Processing
- Processing



## 6 Principles of Deep and Flexible Learning

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** and **experience**

(Fullen, Quinn, & McEachen, 2018; Samuels-Peretz, 2017; Zheng, 2018)



Shallow Learning

What we process  
we learn.

Deep & Flexible Learning



## Deep & Flexible Learning



## Learning and Memory

What we process  
we learn

Cognitive Processing	Behavioral Processing	Social Processing	Affective Processing
----------------------	-----------------------	-------------------	----------------------

Practice at Retrieval	Vary Tasks and Purposes	Principle Level	Awareness and Control	Developmental Feedback	Prior Knowledge & Experience
-----------------------	-------------------------	-----------------	-----------------------	------------------------	------------------------------

# Processing



# Instructional Strategies I



## 25-Word Summaries

**Learning Environment:** Students create clear and coherently organized **25-word summaries** that reflects the **essential meaning** of the current reading, lecture, video, movie, activity, or experience.

**Learning Artifact:** Students **analyze** and **interpret** a reading, lecture, video, movie, activity, or experience in order to **extract** the essential meaning and **compose** a 25-word summary.

## 25-Word Summaries

**A Sample (after reading an article):**

A postmodernism concept of multiplicity, dynamic, and holistic construction of knowledge is favorable in deconstructing the current system, rather, modern concept of a fixed reality.

[25 Words]



## Developmental Feedback

The summary has captured some essential ideas from the reading, although the expression of these ideas needs a bit of refinement. The idea that a postmodernist view of knowledge involves multiple perspectives, dynamic and changing knowledge, and contextually bound value is well captured in the summary. Highlighting the relation to a modern perspective is also nice. The challenge is creating a 25-word summary were every word counts and that the representation of the ideas is both clear and concise.

In the first half of the sentence dealing with postmodernism, the phrase "multiplicity, dynamic, and holistic," is a challenge to decipher. How might this be rephrased to be clearer? Perhaps something like, "in postmodernism, knowledge is viewed as dynamic and holistic, involving multiple perspectives." The second half of the sentence, while capturing a central idea from the reading, "modern concept of a fixed reality," could also be made clearer.

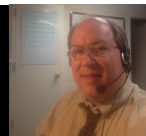
Part of the challenge of the last part of the sentence is that the focus shifts from knowledge to reality, "construction of knowledge" versus "modern concept of a fixed reality." It would be clearer to maintain the focus on knowledge and simply contrast post-modernism's multiple perspectives and dynamic/holistic knowledge with modernism's fixed, objective knowledge. In this case you can end up with a summary such as, "in postmodernism, knowledge is viewed as dynamic and holistic, involving multiple perspectives, while modernism views knowledge as objective and fixed." This revised summary would not capture everything that you included in your summary. The idea of "deconstructing the current system" would still need to be integrated into the revised summary. In addition, the revised summary is not perfect (I'm pretty sure it can be shortened without the loss of meaning, but that will take a bit more time), it's just a way of thinking about how you might create a parallel structure in the summary that will make it easier to comprehend.

## 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 Developmental Feedback



with Dragon Dictate



## 25-Word Summaries

- ✓ 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** and **experience**



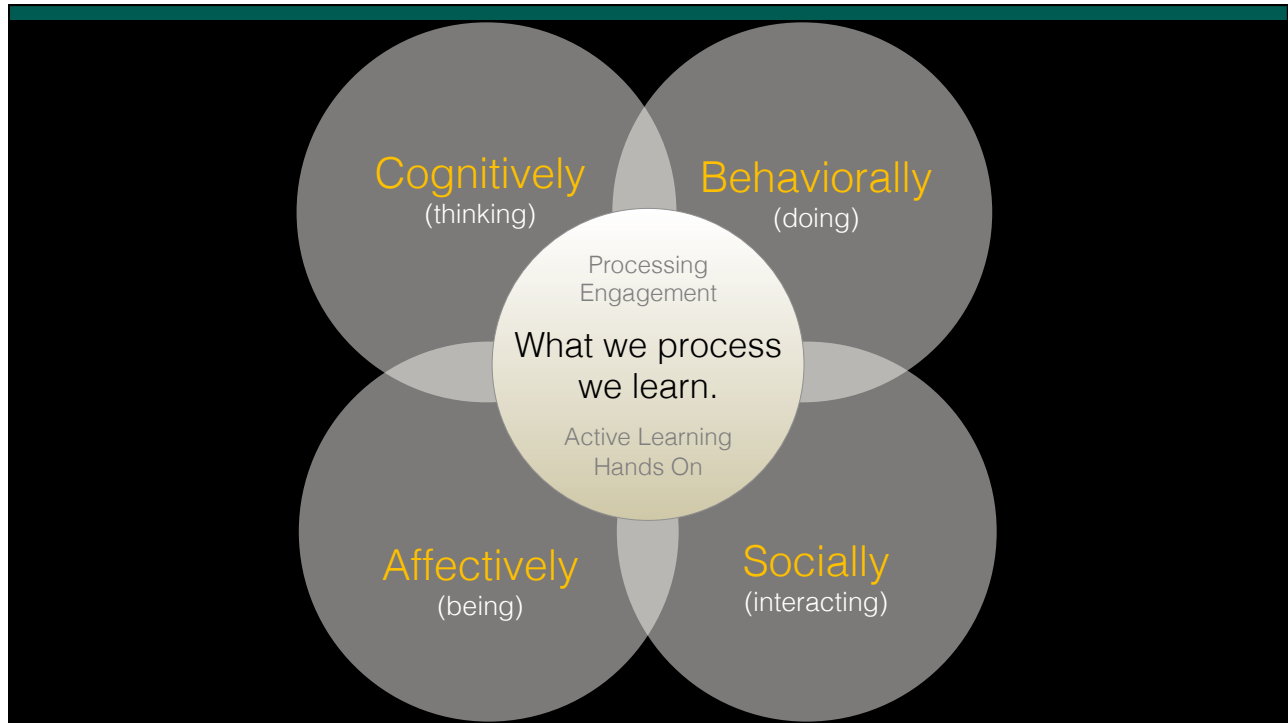




Words

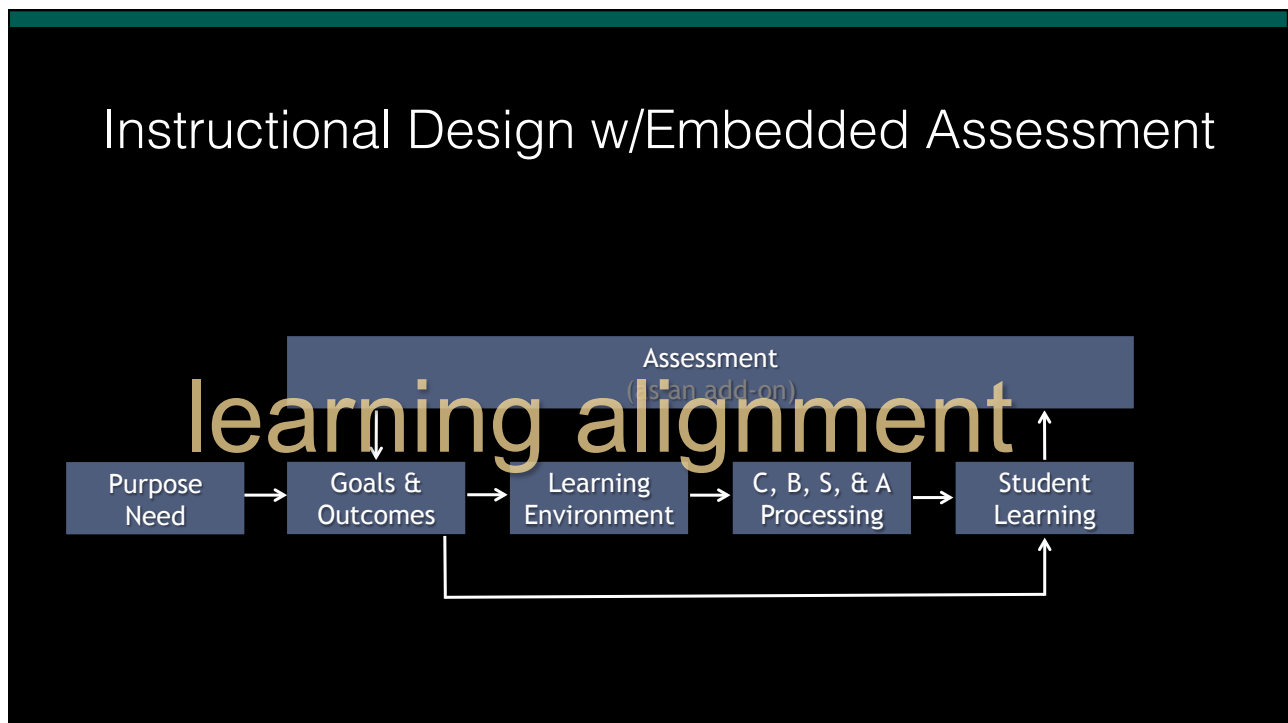
Rest Snore Sound  
Tired Bed that's all Comfort  
Awake Eat Wake  
Dream Slumber Night

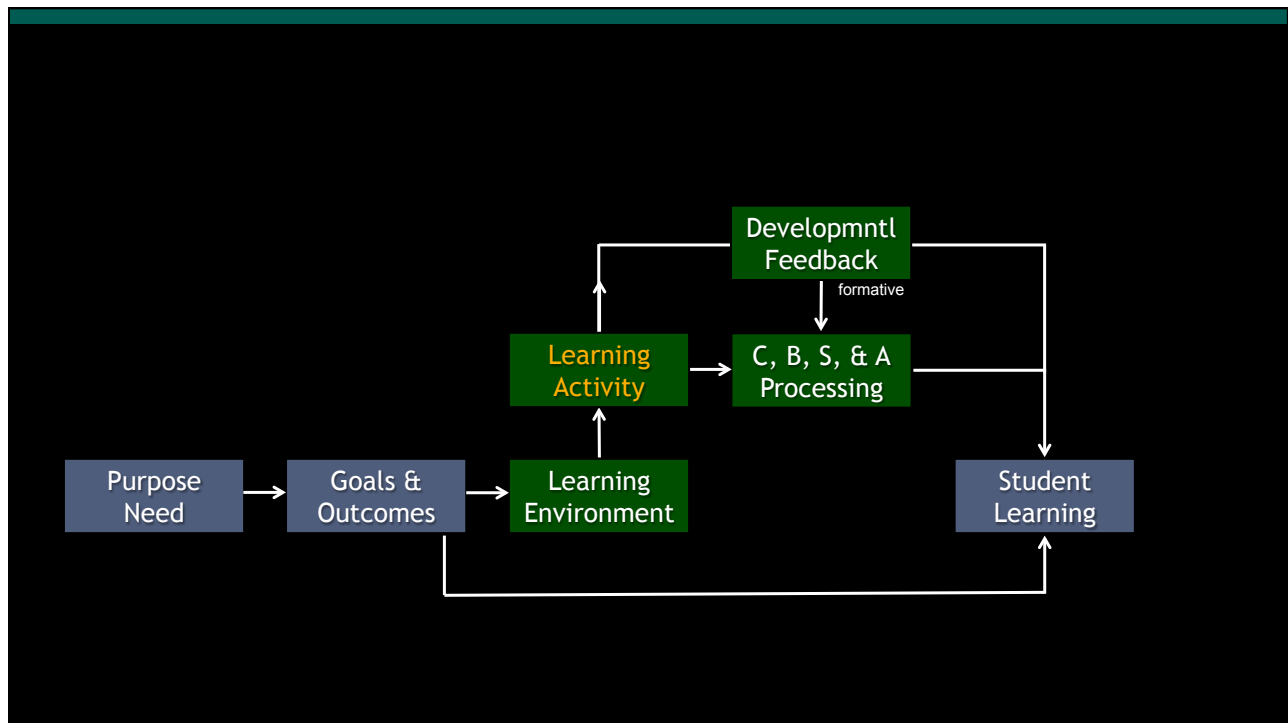
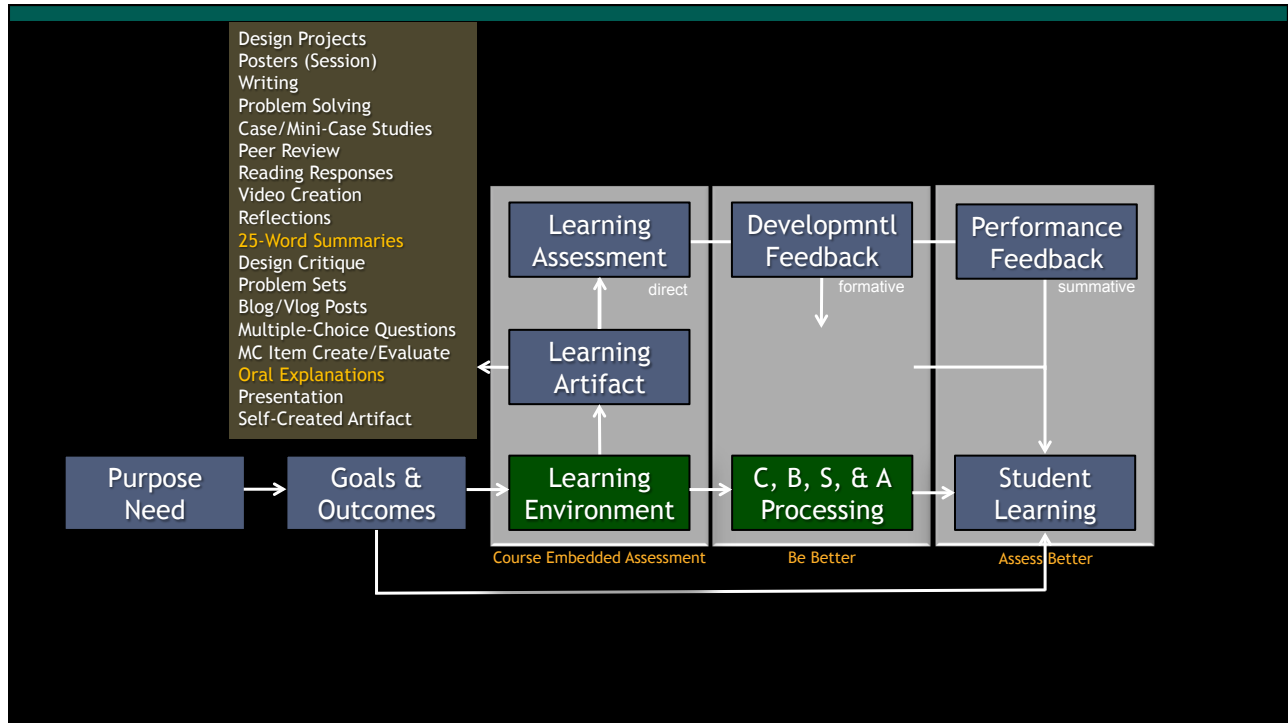
**SLEEP**



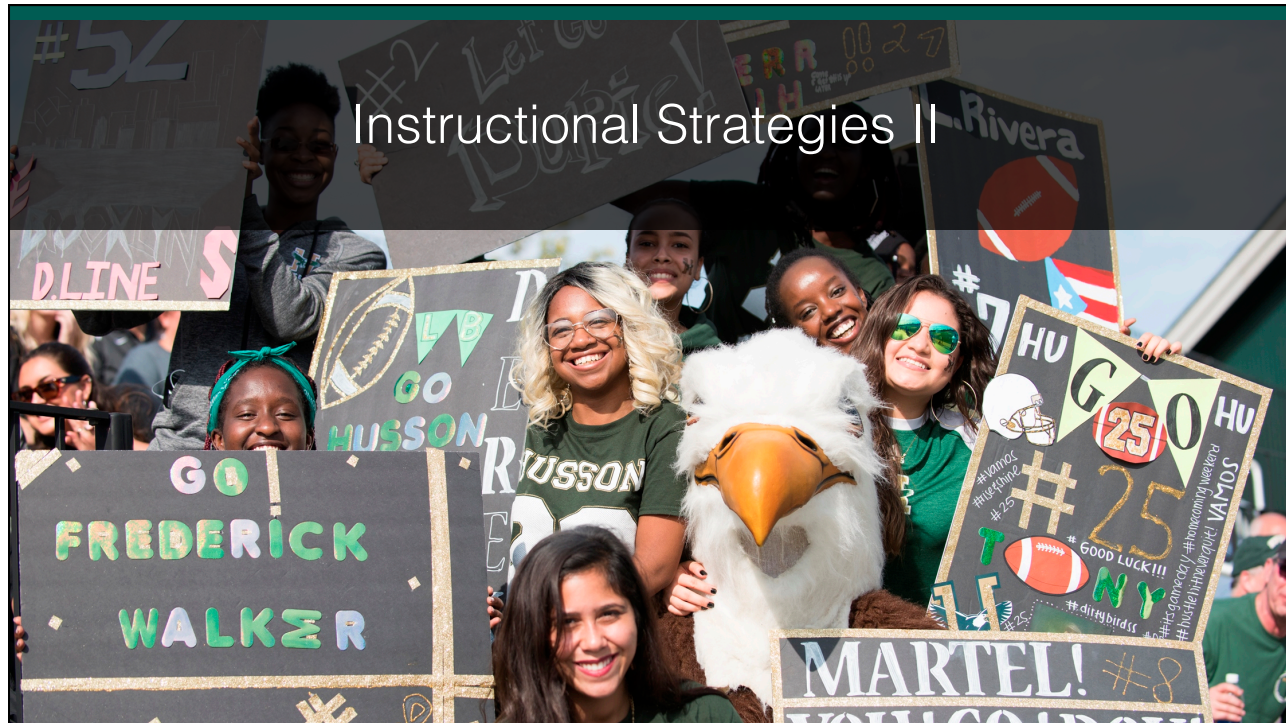
## Use Instructional Design to Herd Your Cats











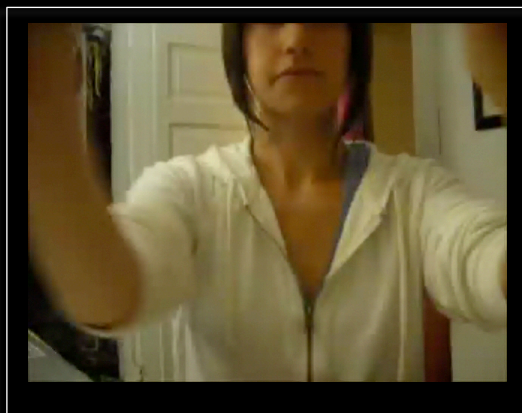
## Instructional Strategies II

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

## Oral Explanation



## Oral Explanation

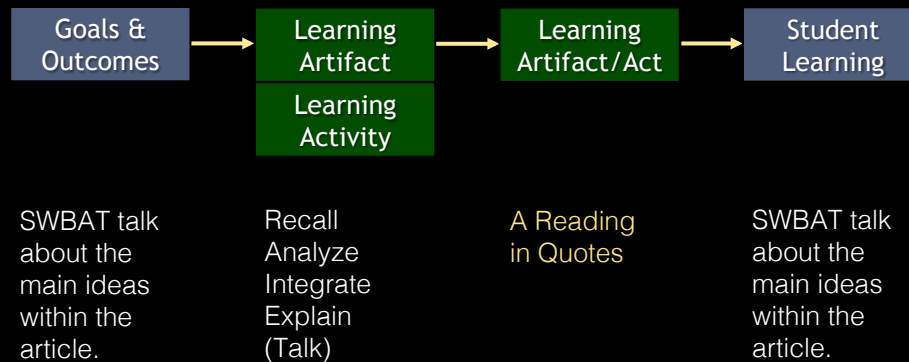
**Grading:** Each Oral Explanation is worth 100 pts and will be assessed using the following criteria:

- |   |        |
|---|--------|
| 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?                            |        |





## Designing Your Own Instructional Strategies



## A Reading in Quotes

**Learning Environment:** Students read a quote from a recently read article and provide an **oral explanation** of the quote and how to **integrate the quote** into a large discussion of the article.

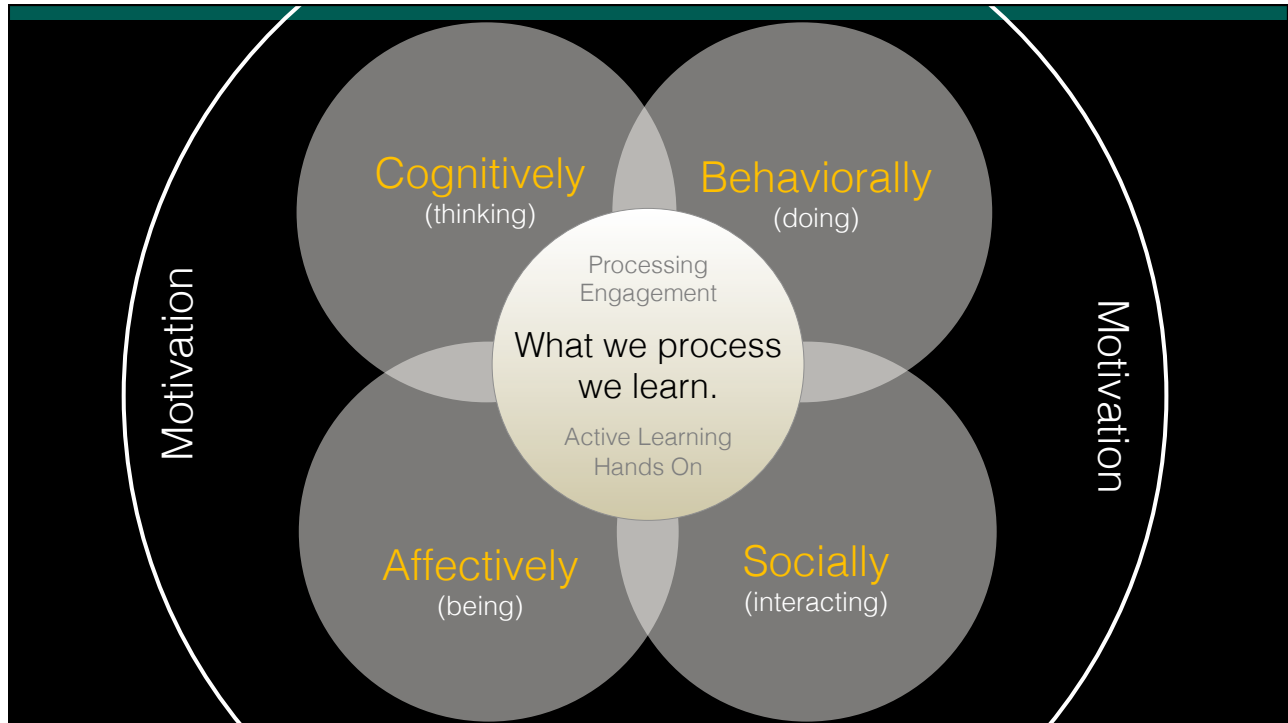
**Learning Artifact:** Students **recall** the article, **analyze** the meaning of the quote, **integrate** the quote into a discussion-based narrative of the article, and orally **explain** the meaning and integration of the quote.

## A Reading in Quotes

1. **Reading Quotes:** Read the article and extract one quote per student (20 Ss, 20 Qs), numbering the quotes in order.
2. **Quotes Selection:** Mix up the order of the quotes and have students select a quote randomly.
3. **Quote Understanding:** Students have time to read and understand the quote, including talking to class mates, before getting/standing in a circle.
4. **Read, Explain, and Integrate:** Each student explains his/her quote in order, also providing a link to the developing narrative.
5. **Clarification:** Following each explanation, the instructor provides any needed clarifications or follow-up questions

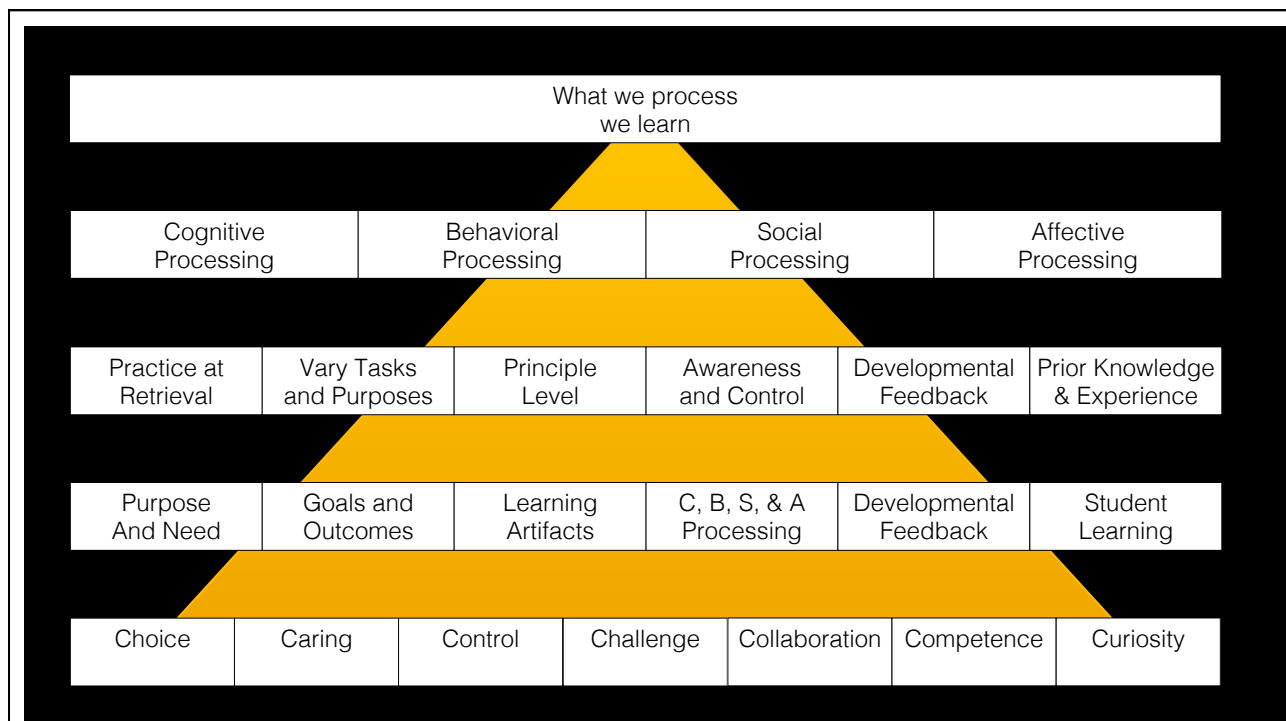
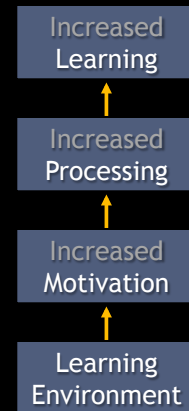
## A Reading in Quotes

- ✓ 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** and **experience**



## The 7 C's of (Internal) Motivation

1. Choice
2. Caring (interest/value)
3. Control
4. Challenge
5. Collaboration
6. Competence
7. Curiosity





## 25-Word Summary

*Directions:* Reflect, analyze, and interpret where we've been the past 2 ½ hours, extracting the essential meaning(s), then organize your thoughts, and write a 25-word summary.

(thinking; talking; writing)

2019 Professional Development Days  
Husson University

## Integrating Learning, Teaching, & Assessment

Fostering Deep and Flexible Learning

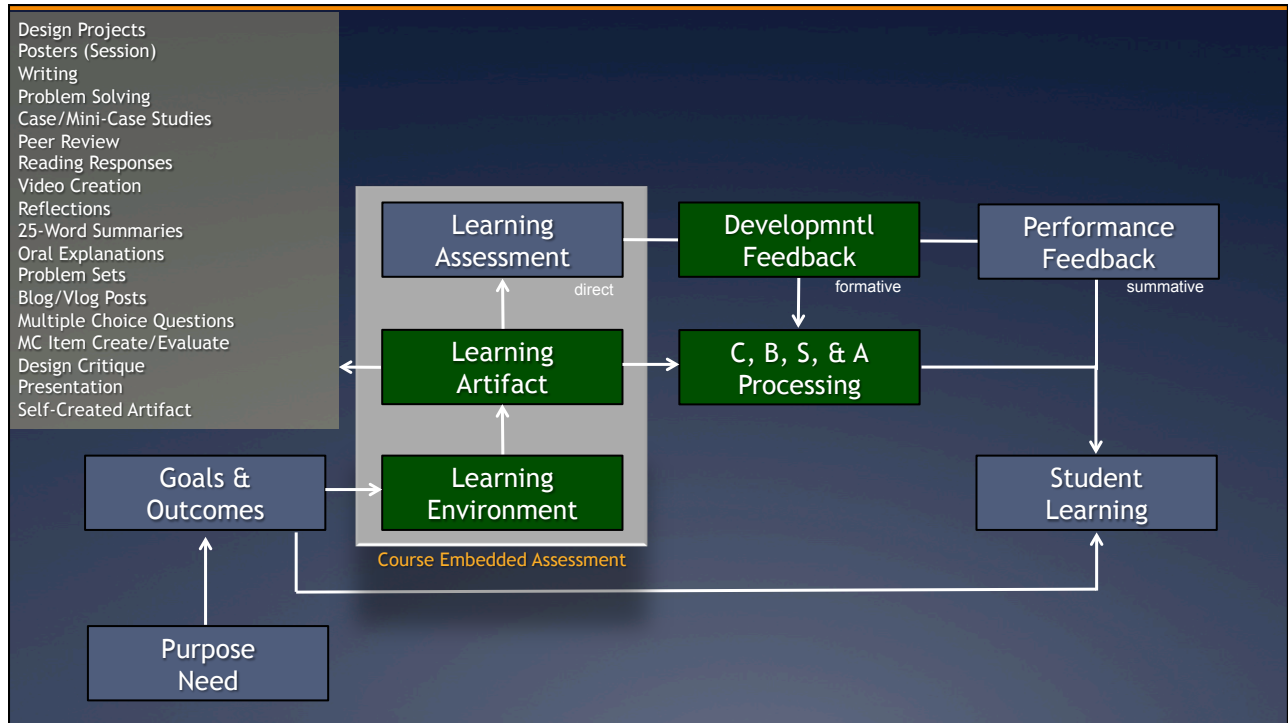
Twitter: @pdoopdoo

Linked In: peter-doolittle

Web: PeterDoolittle.org

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





### Program Assessment (Education Major)

**(Academic) Program Goals:** Graduates have

1. Knowledge of educational concepts, student development, & teaching techniques; and,
2. Knowledge and skills sufficient to enter the K-12 education profession

**(Student) Learning Outcomes:** Students who complete the education major can

1. Describe fundamental educational concepts and purposes;
2. Explain student cognitive, social, linguistic, cultural, and physical development;
3. Create quality lessons, units, and sequences that align across ID components;
4. Implement strategies designed to foster learning across a diversity of students; and,
5. Demonstrate exceptional professional, legal, and ethical conduct.

Course	SLO1	SLO2	SLO3	SLO4	SLO5
ED1001	I		I	I	
ED2010/Field	R		I	R	
ED3305	M&A	I	R		
ED3405		R	R	R	
ED4501/Field			M&A	M&A	

I = introduced; R = reinforced; M = mastered; A = assessed

Course to Program Translation

90-100	Exceeds	3	→
70-89	Meets	2	→
0-69	Below	1	→

2. Knowledge and skills consistent to enter the K-12 education profession.

**Student Learning Outcomes:** Students can

1. Describe fundamental educational concepts and purposes.
2. Explain student cognitive, social, linguistic, cultural, and physical development;
3. Create quality lessons, units, and sequences that align across ID components;
4. Implement strategies designed to foster learning across a diversity of students; and,
5. Demonstrate exceptional professional, legal, and ethical conduct.

3 pts

Curriculum Map

Course	S	Learning Assessment	Written Comments	LO4	Performance Assessment
1001					
2010/Field	R				
3305	M&A				
3405					
4501/Field					

25-Word Summary

C, B, S, & A Processing

100 pts

Learning

Development

Performance