



Effective Strategies for Deep and Flexible Learning

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

Twitter: @pdoopdoo

THE
 Teaching
 PROFESSOR
 CONFERENCE

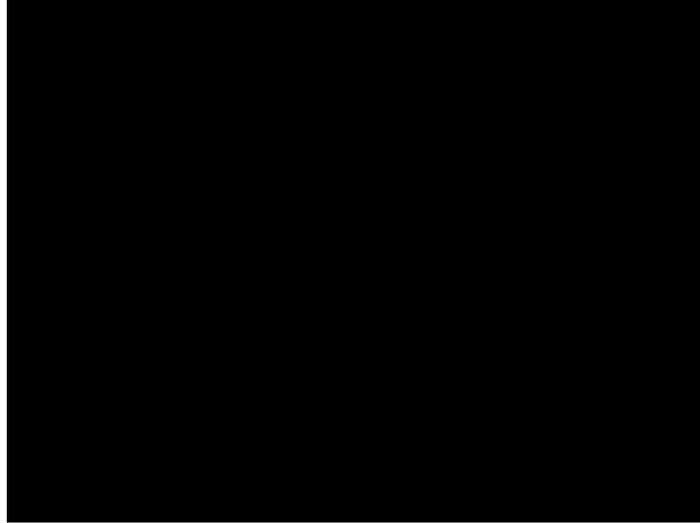
2019

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





Principles of Deep & Flexible Learning

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

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

Shallow Learning

Processing
Engagement

What we process
we learn.

vs

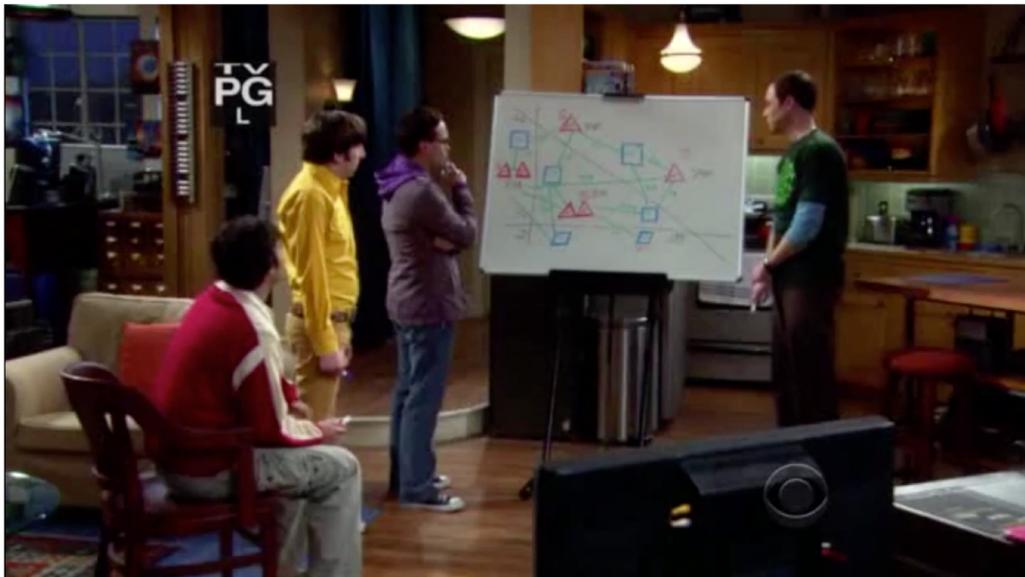
Active Learning
Hands On

Deep & Flexible Learning

Shallow 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
& Purposes

Principle
Level

Awareness
& Control

Develpmntl
Feedback

Prior Know
& Experience

Instructional Strategies for Deep and Flexible Learning



25-Word Summary

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.

Example:

Post-modernity celebrates individuality, heterogeneity, and the possibility of multiple, subjective realities; further, it promulgates the absence of a set standard against which everything is judged.

[25 Words]



25-Word Summary

Summarium habet captam quaedam notiones ex Lectio essential, etsi haec expressio ideas aliquantulus of opus fuit. In idea quod sit cognitio ex sententia multa prospectus postmodernist, dynamic et scientia mutantur, et vinctum contextually valorem captum est atque in ipsum. Illuminationes excitare in relatione ad modern perspective est et delicatus. XXV-summary et omne verbum a provocatione ad partum est verbum mites verd, qui repraesentantur per ideas est tam clarum atque brevis explicatio.

In primum dimidium ad damnationem de postmodernism, the phrase 'unum, dynamic, et Plena' a challenge perspici possint. Ut hoc pacto rephrased clarius? Fortasse aliquid simile, "in postmodernism, scientia in quantum est dynamic holistic, multarum prospectus". Secundum ad media damnationem, cum a central idea de Lectio caperent, 'conceptum a modern certum re, "etiam clarius percipiantur.

Ultima pars de provocatione ad focus transferentis inquietabit ex parte super aliquo sententiae capite, quod ad scientiam re vera "ex constructione scientia" versus "conceptum a modern certum re." Melius est ponere esse in focus tantum in scientia et in alia parte post-modern scriptor dynamic et multa prospectus / Plena modernisms scientia est certa scientia objective. Hic vos can terminus sursum per a summary ut "in postmodernism, scientia in quantum est dynamic holistic, multarum prospectus, cum modernismi notitiam views profectus est objective." Et hoc recognito summary capere non includitur in omnibus te ipsum. In idea de "Deconstructing current ratio quod 'esse necesse est esse etiam integrated in summary recens instaurati sunt. Praeterea recens instaurati sunt summary, non est perfectus (Im 'pulchellus certus possit remitti sine damnum ex significatione sed quod take aliquantulus magis vicis), quod suus' iustus viam cogitas quam ut creare parallel Romanae ministeria, in summary est ad intellegendum facilius faciam.

25-Word Summary

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? | |

25-Word Summary

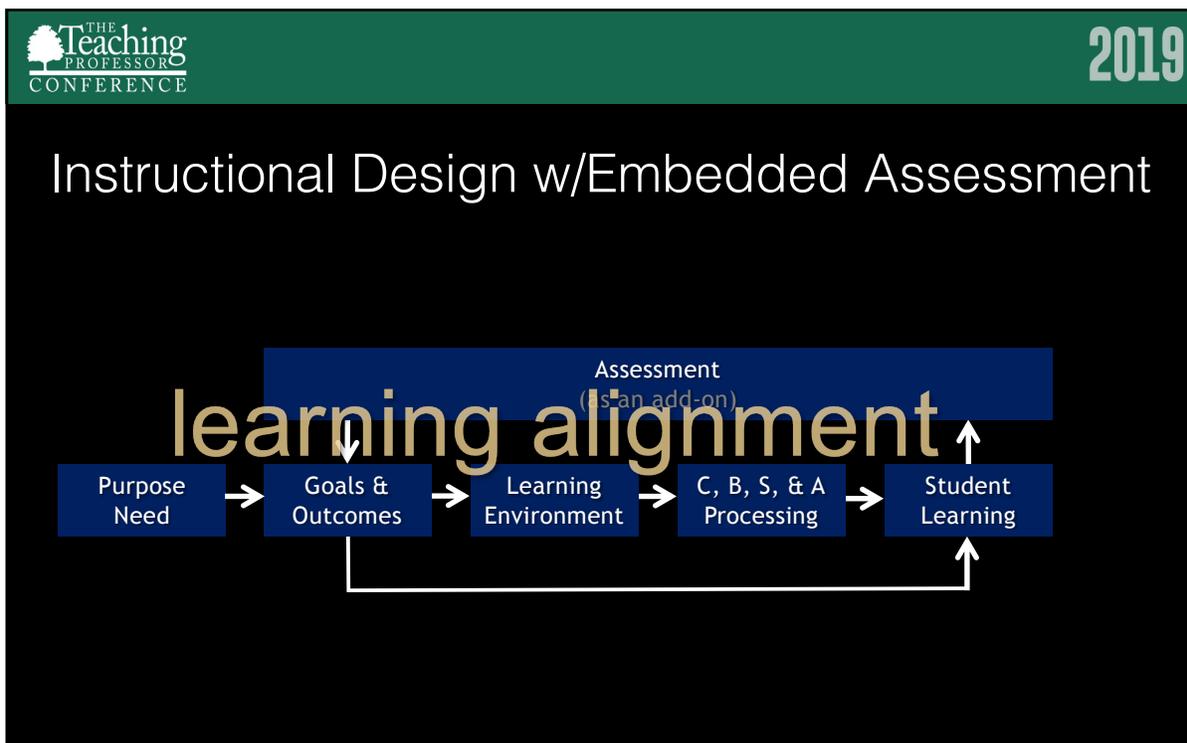
Developmental
Feedback

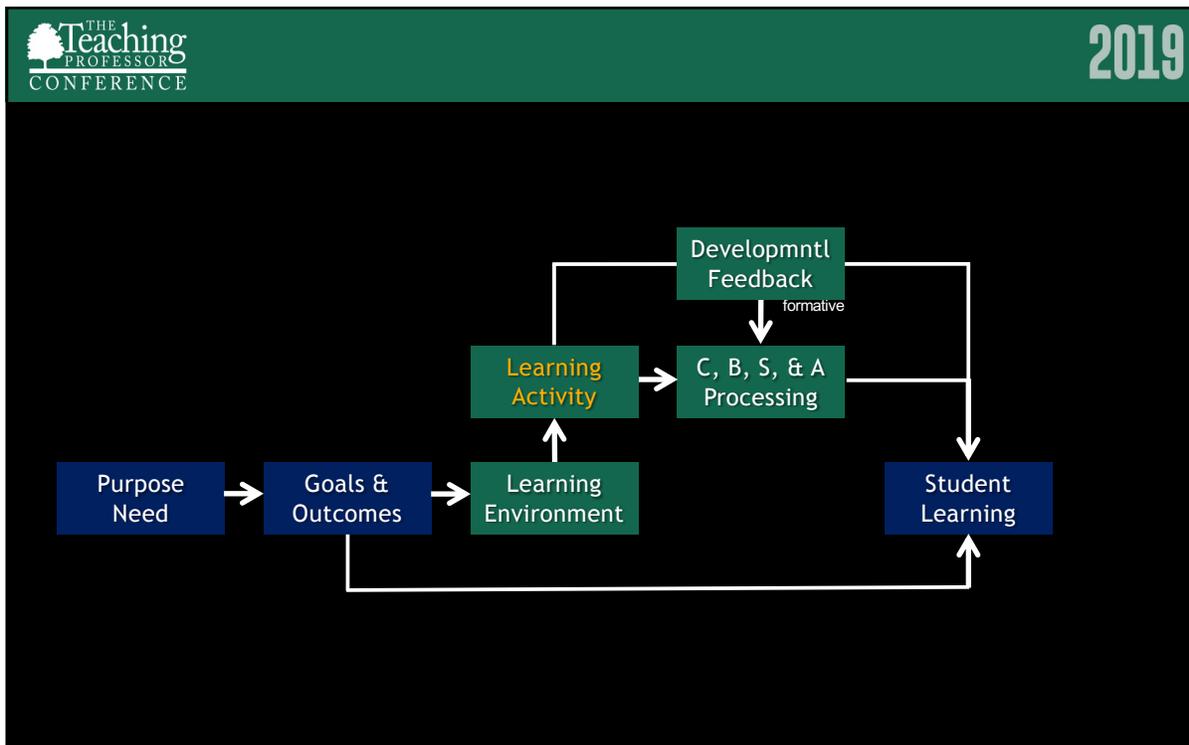
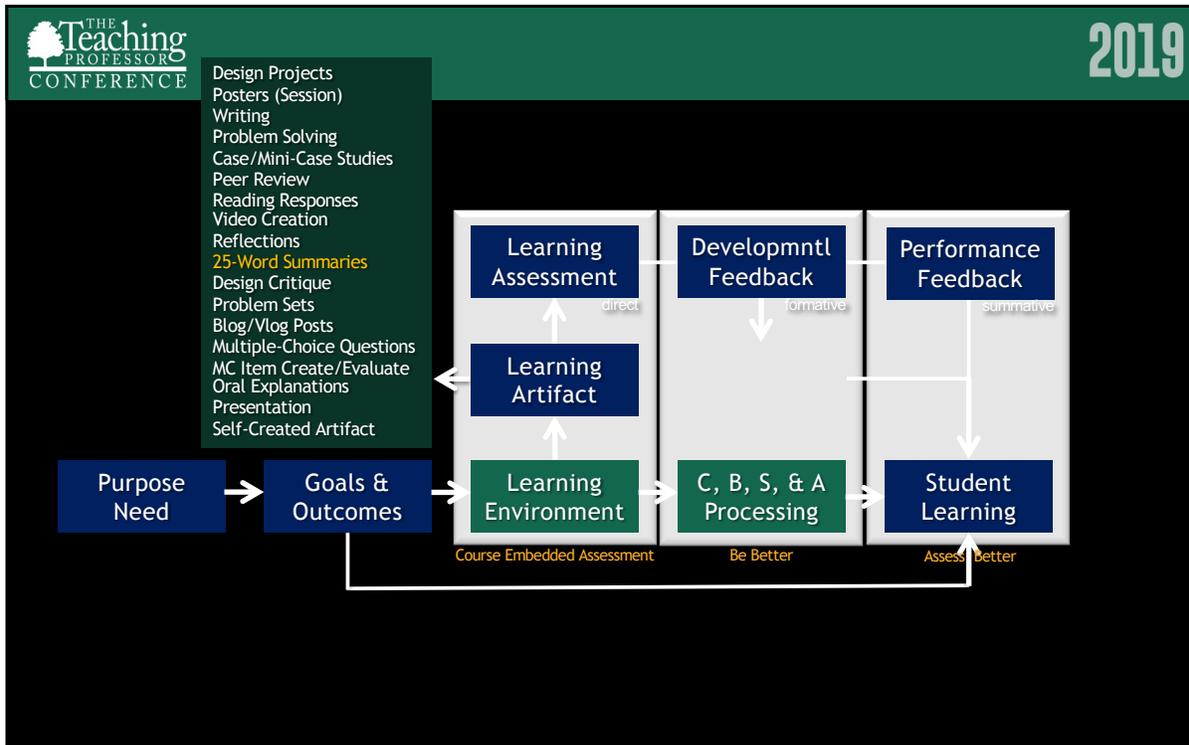


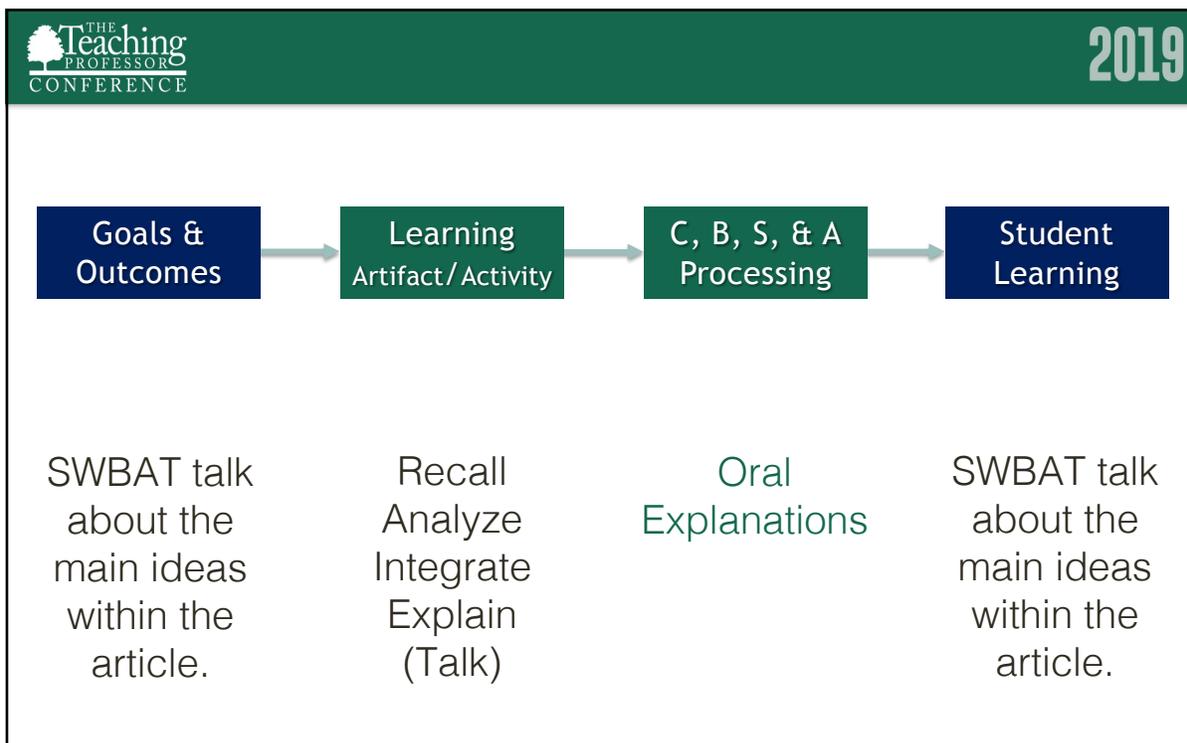
with
Dragon
Professional or Home

25-Word Summary

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





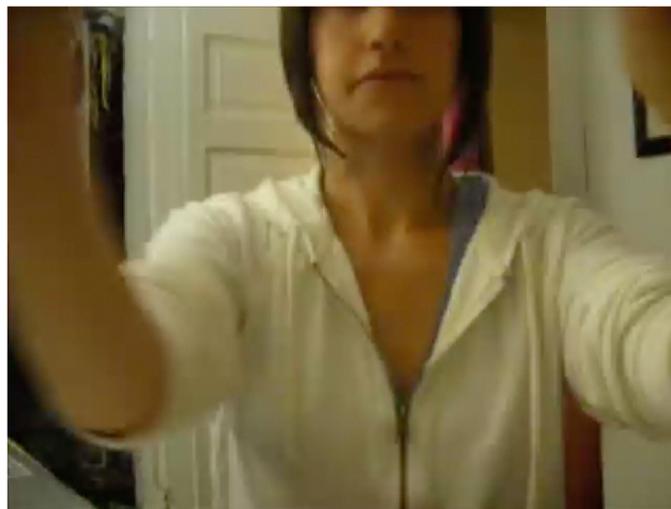


Oral Explanations

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



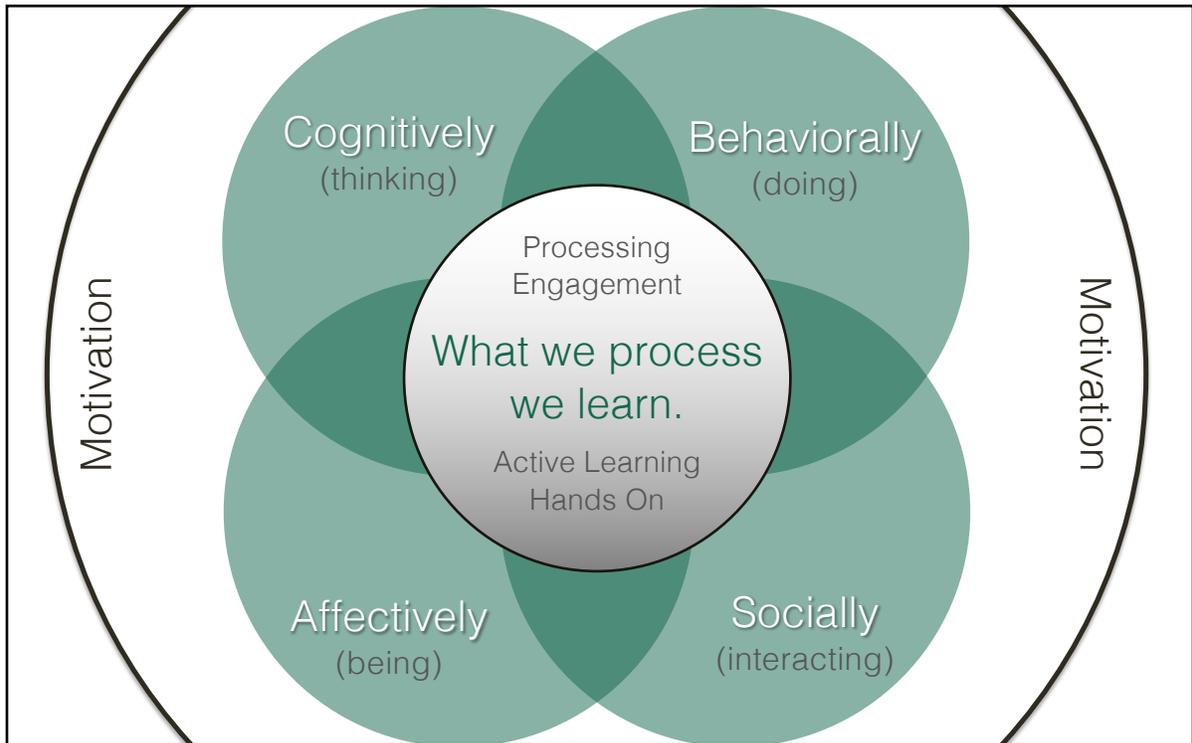
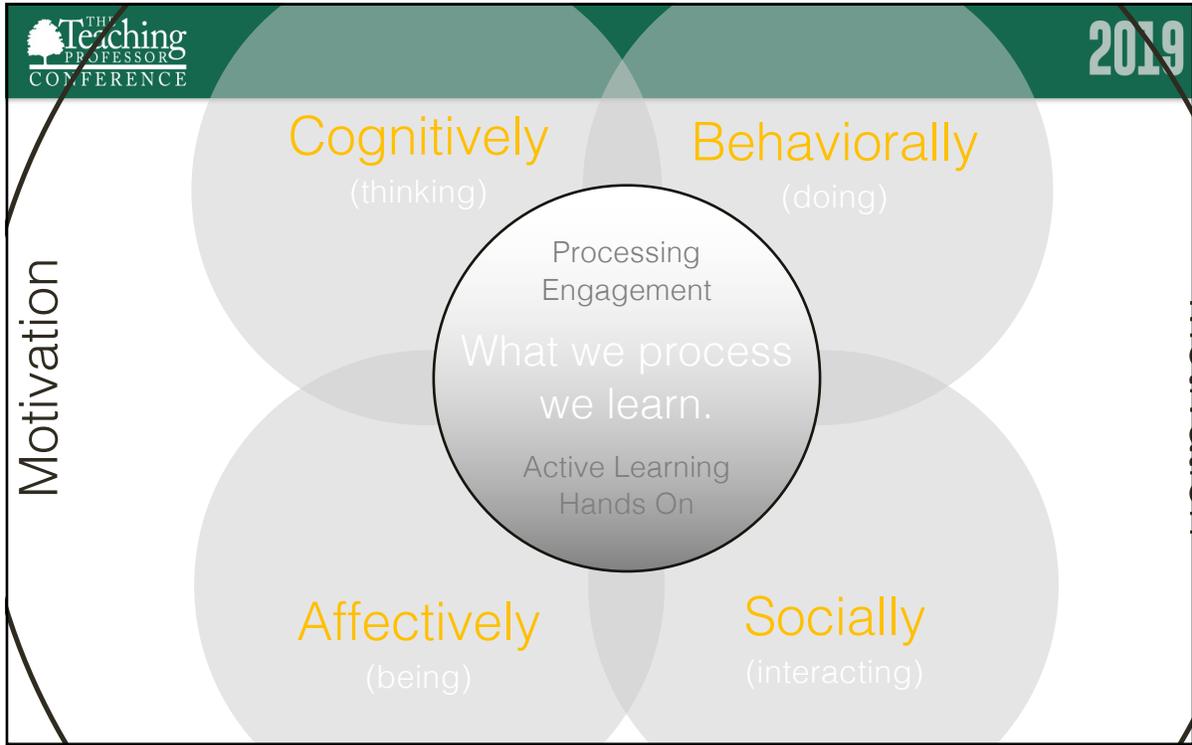
Oral Explanation

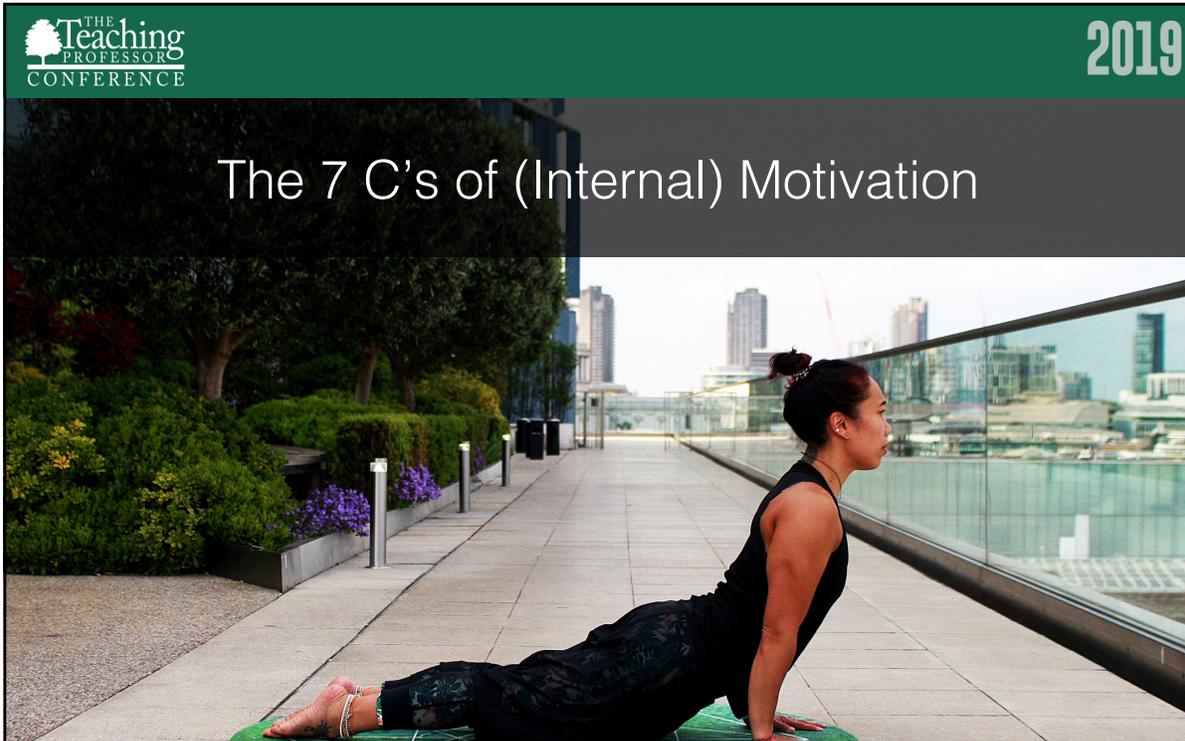
Grading: Each Oral Explanation is worth 100 pts and will be assessed using the following criteria:

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

Oral Explanation

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

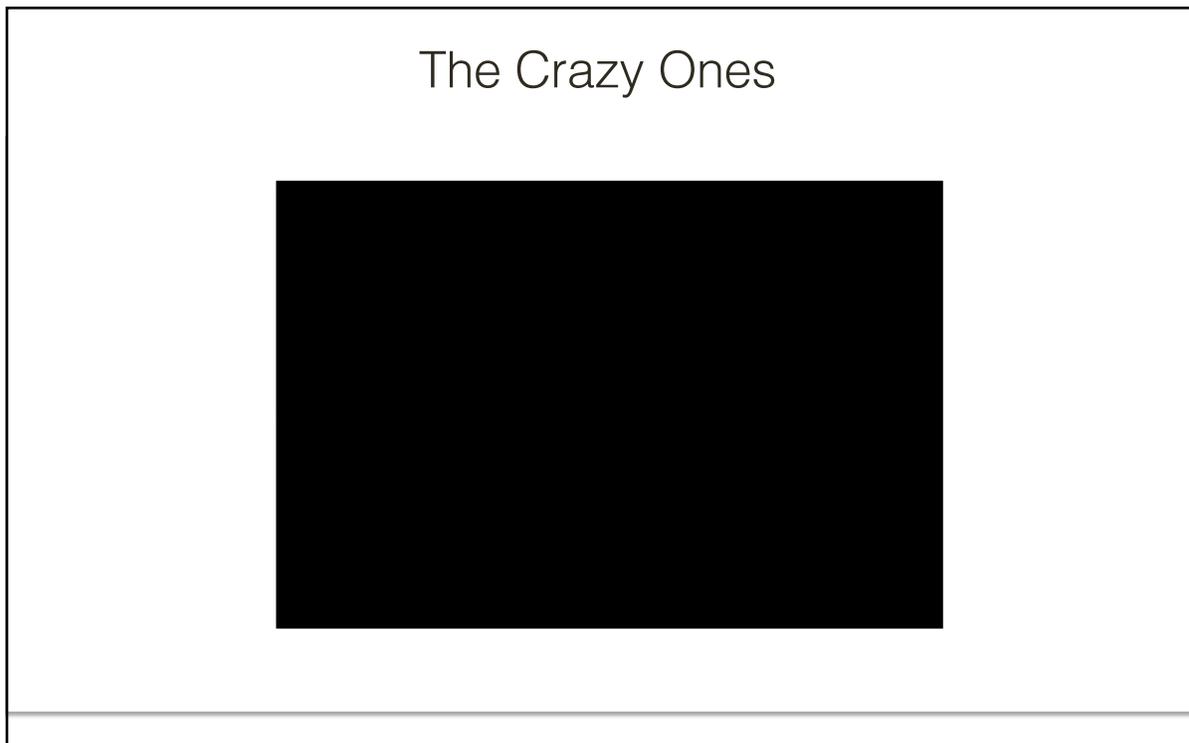
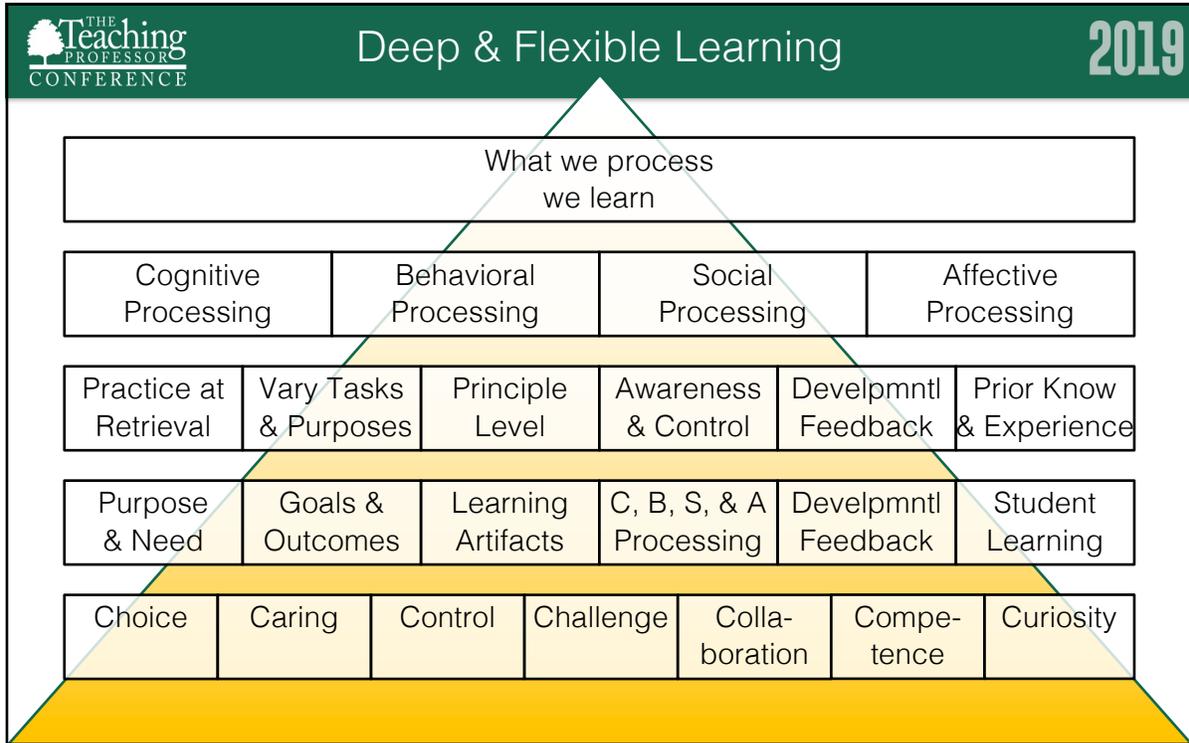




Motivation

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

Learning Environment → Increased Motivation → Increased Processing → Increased Learning





Effective Strategies for Deep and Flexible Learning

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

Twitter: @pdoopdo