VIRGINIA TECH

Top Down and Bottom Up

Fully Integrating Learning and Assessment Practices



PPTs & Handouts: www.ResearchNotRhetoric.com/rnr-talks.php

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

AA
CLI Institute on General Education and Assessment

Anticipation Guide

Directions: Agree, Disagree, or Edit each statement.

- 1. Anyone can teach.
- 2. Active learning in students is fostered by note taking and discussions with fellow students.
- 3. Assessment focuses on determining what students know and can do.

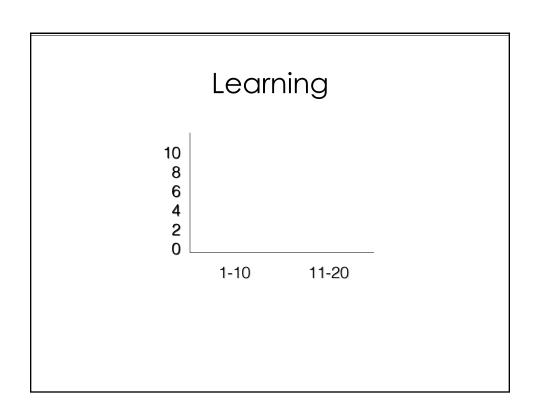
PPTs & Handouts: www.ResearchNotRhetoric.com/rnr-talks.php

perspectives 🖘

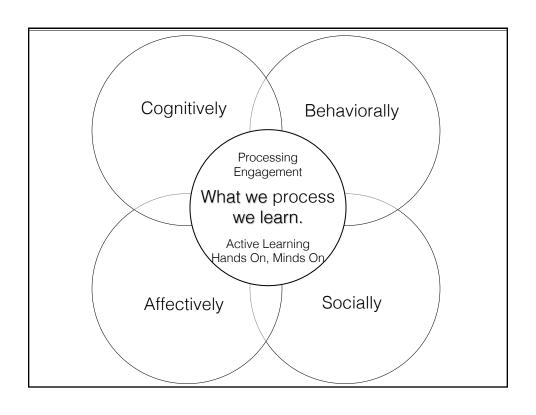
Learning First



processing



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



Strategies for Learning & Assessment



artifacts

25-Word Summaries Fostering Deep & Flexible Knowledge

Learning Environment: Students create a 25-word statement addressing the essential ideas, focusing on explaining and integrating ideas, not listing topics.

Learning Artifact: Students read a chapter or article, or watch a video, and extract, organize, summarize, and integrate the reading's essential ideas into a clear and concise statement.

Learning Assessment: Summaries are assessed using a scoring guide focused on structural format, clarity of thought and expression, and delineation of core messages.

25-Word Summaries Fostering Deep & Flexible Knowledge

Radical constructivism views knowledge as constructed through repeated experiences reconfirmed or rejected through comparison over time; this structures our experiences, which we perceive as reality. [25 words]

25-Word Summaries

Grading: Each Chapter Summary Statement is worth 100 points and will be assessed using the following criteria:

1. Structural Format

20 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

40 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?

40 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

3. Delineation of Core Message



with Dragon Dictate

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 Explanations

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

c. is the application thorough, meaningful, and appropriate?

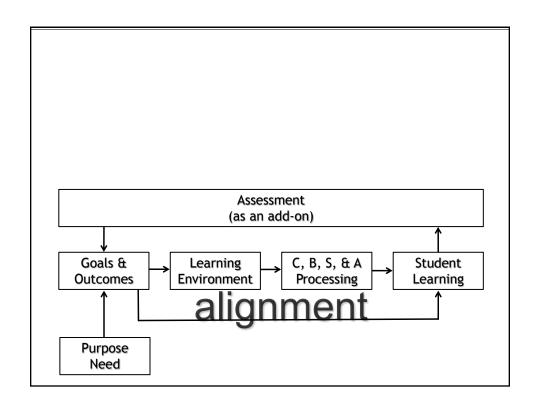
1. Organization 20 pts a. are introductions and conclusions used effectively? b. do the expressed ideas follow a logical progression? c. are explanations and applications provided? 2. Clarity of Thought and Expression 20 pts a. are the ideas expressed well, well thought out, and integrated? b. are there 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?

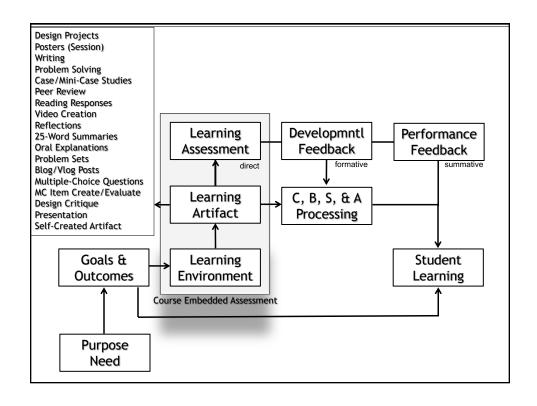
Integrating Programs & Courses



alignment

clarity 🖙





Program Assessment (Education Major)

(Academic) Program Goals: Graduates have

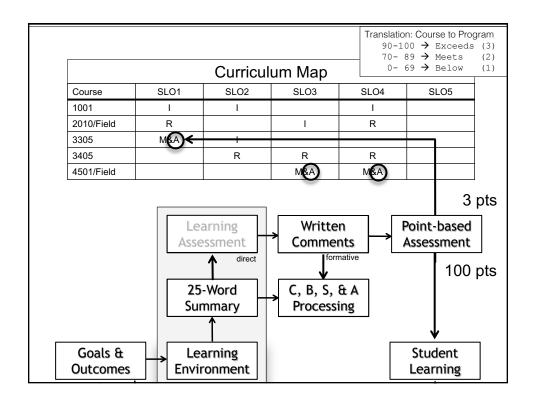
- 1. Knowledge of educational concepts, student development, & teaching techniques; and,
- 2. Knowledge and skills sufficient to enter the K-12 education profession

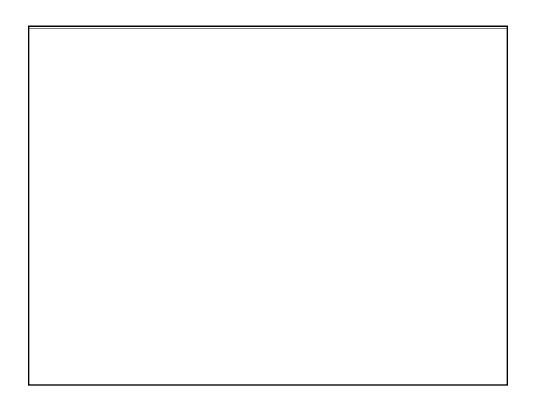
(Student) Learning Outcomes: Students who complete the education major can

- 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.

Curriculum Map					
Course	SLO1	SLO2	SLO3	SLO4	SLO5
ED1001	ı			I	
ED2010/Field	R_		I	R	
ED3305	M&A)	I			
ED3405		R	R	R	
ED4501/Field			M&A)	M & A	

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





Integrating Gen Ed & Courses



alignment

moving parts 🖘

General Education Goals & Outcomes (@ VT)					
Discourse	Comp/Quant Thinking	Reasoning Soc Sci	Reasoning Nat Sci	Practice in Design/Arts	Identity & Equity in US
Et harum rerum Nam libero nobii Quo minus ideo Autem lev aut et Voluptates est	Sed ut natus Sit laudantium Totam rem ipsa Quae ab illo et Quasi beatae su Ipsam quia odit	Dolere magnam Ut enim ad quis Nostrum ullam Suscipit nisi ut	Et harum rerum Nam libero nobii Quo minus ideo Autem et aut et	Sed ut natus Sit laudantium Totam rem ipsa Quae ab illo et Quasi beatae su Quaerat aliqua	Dolere magnam Ut enim ad quis Nostrum ullam Suscipit nisi ut Velit esse quam

Reasoning in the Social Sciences

- 1. Identify fundamental concepts of the social sciences.
- 2. Analyze human behavior, social institutions, and/or patterns of culture using theories and methods of social science.
- 3. Identify interconnections among and differences between social institutions, groups, and individuals.
- 4. Analyze the ways in which values and beliefs relate to human behavior and social relationships.

Reasoning in the Social Sciences Identify fundamental concepts of the social sciences. Analyze human behavior, social institutions, and/or patters of culture using theories and methods of social science. Identify interconnections among and differences between social institutions, groups, and individuals. Analyze the ways in which values and beliefs relate to human behavior and social relationships. Curriculum Map SLO1 SLO₂ SLO3 SLO4 PSY202 I, R, M, & I, R, M, & A I, R, M, & A PHL301 I, R, M, & I, R, M, & A I, R, M, & A SOC311 Ì, R, M, & A I, R, M, & A I, R, M, & A EDU292 I, R, M, & A A & M I, R, M, & A S/O Pedagogy Assessment Scoring ranslation PSY202 Presentation Lecture 100 pts PHL301 Readings Paper 50 pts SOC311 EDU292 Online Module ePortfolio 100 pts

	Pedagogy	Assessment	Scoring	Translation
PSY202	Lecture	Presentation	100 pts	90 -100 pts = 3 60 - 89 pts = 2 0 - 59 pts = 1
PHL301	Reading	Paper	50 pts	45 - 50 pts = 3 35 - 44 pts = 2 0 - 34 pts = 1
SOC311				
EDU292	Online Module	ePortfolio	100 pts	80 -100 pts = 3 60 - 79 pts = 2 0 - 59 pts = 1

Reasoning in the Social Sciences

- 1. Identify fundamental concepts of the social sciences.
- 2. Analyze human behavior, social institutions, and/or patterns of culture using theories and methods of social science.
- 3. Identify interconnections among and differences between social institutions, groups, and individuals.
- 4. Analyze the ways in which values and beliefs relate to human behavior and social relationships.

Curriculum Map				
	SLO1	SLO2	SLO3	SLO4
PSY202	✓	✓	✓	
PHL301	✓		✓	✓
SOC311		✓	✓	✓
EDU292	✓	✓	✓	

Translations should be determined by faculty, or faculty teams, and should involve norming of assessments across faculty and departments to increase scoring consistency (reliability).

While the particulars may be different across departments, the categories may be the same: theories, theorists, methodologies, analyses, core knowledge, and common terms.

Epiloge

VIRGINIA TECH.

Top Down and Bottom Up

Fully Integrating Learning and Assessment Practices

www.ResearchNotRhetoric.com/rnr-talks.php

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

AA