Active Learning, Proactive Teaching, Deep and Flexible Knowing



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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 🖙















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



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.



Post-modernism views knowledge as subjective and functional, not valuable itself. Reflective, needs-based knowledge creation in post-modernist education overcomes static, constrained modernist learning allowing complete education. [25 words]

The summary is an excellent representation of the reading. You have captured multiple central ideas and express them well. That said, there are a couple things to think about as you move forward to other summaries. In the first sentence, the first part is quite clear, "postmodernism views knowledge as subjective and functional," however the last phrase needs clarification for someone who has not read the article ("not valuable itself"). The article does reference that modernism views knowledge as independently valuable, but that postmodernism views the value of knowledge in context. Simply stating that postmodernism views knowledge as "not valuable itself," can lead to misunderstanding. Perhaps rather than phrasing that last part in the negative, you could switch to a more positive phrasing, such as, "postmodernism views knowledge as subjective and functional, its value contextual." Think about how you might rephrase the last part of the first sentence.

The second sentence has a similar pattern, where the first part of the sentence is very clear, yet the ending of the sentence seems murky, "allowing complete education." What does that really mean? In what way is postmodern education more "complete" than a modernist education? By "complete" do you mean personally relevant? Socially useful? Both objective and subjective? How might this be clarified?

Finally, think about how the two sentences might be combined to increase their meaningfulness. The first sentence focuses on the subjective nature of postmodernism and the second sentence focuses on postmodernist education (an application). Is there a way to combine these or two sentences or transition between the two sentences to make the link between subjective knowledge and flexible education more apparent?



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What does the activity tell us?

- 1. Meaning is constructed during experience and reconstructed during recall.
- 2. Construction/reconstruction result from 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.



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Course Embedded Assessment













| | Program Assessment (Education Major) | | | | | | |
|----|--|-------------------|-----------------|------------|-----|-----|---|
| 4) | cademic) 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 | | | | | | |
| Si | udent 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. | | | | | | , |
| | | Curriculum Map | | | | | |
| | Course | O1 | O2 | O3 | O4 | O5 | |
| | 1001 | I | L | I | I. | | |
| | 2010/Field | L | R | | I | | |
| | 2150 | R | | I. | | I | |
| | 3305 | R | M&A | | I | I | |
| | 3405 | M&A | | R | R | R | |
| | 4501/Field | | | R | R | R | |
| | 4502/Field | | | M&A | M&A | M&A | |
| | I = introduced; F | R = reinforced; M | 1 = mastered; A | = assessed | | | |
| | Loorning | | | | | | |

| | | Co | ourse to Prog | ram Translation | |
|----------------------|---|---|---|--|-------------|
| Rubi Rubi Rubi | ic Score C ic Score C ic Score C | Composite Sco Composite Sco Composite Sco | ore Scorin ore Scorin ore Scorin | $\begin{array}{c} \text{ig Guide} \\ \text{ig Guide} \\ \text{g Guide} \\ g Guide$ | 32 |
| nication | udent Learning 1. Describe fu 2. Explain stu 3. Create qua 4. Implement 5. Demonstra | Outcomes: S indamental edi dent cognitive, lity lessons, ur strategies des <i>te</i> exceptional | tudents can ucational cond social, linguis nits, and sequ igned to foste professional, | cepts and purposes. stic, cultural, and physical development; ences that align across ID components; r learning across a diversity of students; and, legal, and ethical conduct. | commu |
| mu | | | Curricu | lum Map | nica |
| E L | Course | O1 | O2 | 25-Word Summaries | |
| S | 1001 | I | L | Grading: Each Chapter Summary Statement is worth 50 points and will be graded using the following | g criteria: |
| | 2010/Field | L | R | Structural Format a. Is the summary 25 words or less? b. Is the summary a coherent sentence, or sentences? | 10 pis |
| | 2150 | R | | c. Does the summary avoid a simple listing of concepts, terms, or themes? 2. Clarity of Thought and Expression | 15 pte |
| | 3305 | R | M&A | a. Are the ideas expressed well, well thought out, and integrated? c. Does every word in the summary have a meaningful purpose? | 15 pis |
| | 3405 | M&A | | d. Are correct grammar and syntax used? 3. Delineation of Core Message | 25 pts |
| | 4501/Field | | | a. Does the summary accurately reflect the reading's central or essential message? b. Are the reading's central or essential messages fully integrated? | |
| | 4502/Field | | | c. Does the summary reflect an understanding of the reading? | |
| | I = introduced; F | R = reinforced; N | 1 = mastered; A | 8 relevant x 50 points = 400 points | |
| | | | arning | break | J |



| Reasor Outcome patterns | hing in the 2: Analyze of culture u | Sen E Social Sc human beh sing theories | d Shuff iences avior, social in: and methods | stitutions, and of the social | Rubric with Criteria and Descriptions Norming nd/or al sciences. |
|-------------------------------|---|--|---|-------------------------------|---|
| Satisfying Course | Course Content | Course Pedagogy | Course Assessment | Assessmnt Grading | Program Lvl Interpretation |
| History | Blah, Blah | Reading | Paper | 100 pts | |
| Geography | Blah, Blah | Media | Project | 50 pts | |
| Psychology | Blah, Blah | Lecture | Test | 100 pts | |
| Sociology | Blah, Blah | Coop Lrn | Presentation | 200 pts | |

| | Gen Ed | l Shuffle | Rubric with Criteria and Descriptions |
|--|--|--|---|
| | | | Norming |
| Reasoning in Outcome 2: Ana patterns of cultu | the Social Scie alyze human behav are using theories a | rior, social institution and methods of the s | ns, and/or social sciences. |
| | and the second | | |
| Criteria (obs & measure) | Exceeds Expectations | Meets Expectations | Below Expectations |
| Criteria (obs & measure) Describe human behavior | Exceeds Expectations | Meets Expectations | Below Expectations |
| Criteria (obs & measure) Describe human behavior Analyze using theories/methods | Exceeds Expectations | Meets Expectations | Below Expectations |





Instructional Assessment Strategies





25-Word Summaries

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

Learning Artifact Processing: Students read a chapter or article 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.

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| Oral Explanations | |
|---|--------|
| Grading: Each Oral Explanation is worth 100 pts and will be graded using the following criteria: | |
| 1. Organization a. are introductions and conclusions used effectively? b. do/do the expressed ideas follow a logical progression? c. are explanations and applications provided? | 20 pts |
| 2. Clarity of Thought and Expressiona. 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? | 20 pts |
| 3. Essential Content Explanation 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? | 30 pts |
| 4. Essential Content Applicationa. 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? | 30 pts |

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Concept Maps

Learning Environment: Students create visual maps that demonstrate the relationships between concepts, including the nature of the relationships through links and descriptions.

Learning Artifact Processing: Students organize, relate, and represent the relationships, as well as describe the relationship in a brief word or phrase.

Learning Assessment: Concept maps are assessed using a scoring guide focused on organization, relationship, and description.



| | Conce | ept Map | S | |
|--------------------------------------|--|---|--|----------|
| ., | 1 | Criteria | | Poi |
| | 3 | 2 | 1 | <u> </u> |
| Relationships between concepts | Clear relationship between concepts. Hierarchical organization from components to sub-components. | Relationship between concepts evident. Components and sub- components present. | Unclear relationship between concepts. Components and sub-components unorganized. | |
| Cross-linkages | Logical linkages. Clear and thorough explanation of links. Information is clear, accurate and precise. | Logical linkages. Explanation of links unclear. Information is accurate. | Linkages do not make sense and are not explained. Information is inaccurate. | |
| Presentation | Presentation is orderly and visually appealing. Demonstrates effective use of the elements of graphic design. | Presentation is orderly and effective | Presentation is not orderly. | |
| | | | | |

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Poster Sessions

Learning Environment: Student groups produce conference-style posters and present the posters in a poster session.

Learning Artifact Processing: Students select, research, organize, summarize, and communicate specific energy content in a poster format.

Learning Assessment: Group posters are assessed using rubrics by peers, faculty, administrators, and the course instructor.





| ermak Resources and the Er | nvironment Poster | Rubric (DRAFT) | | |
|---|--|--|---|-------------------------------------|
| Group Number, Energy sour | ce: | | 20 points | |
| Criteria | 3 | 2 | 1 | 0 |
| Organization (3) | Well Organized, followed instructions | Well organized, did not follow instructions | Poorly organized, did not follow instructions | Random |
| Readability, Neatness (2) | | Easy to read and understand, Good curb appeal | Adequate | Did not use template provided |
| Cradle to Grave concept and content (9) Resources needed, Environmental impacts, Advantages/disadvantages | Covered all aspects, well thought out and described | Covered most aspects, fairly well thought out and described | Covered some aspects, poorly thought out and described | Start over |
| Net energy (2) | | Concept and discussion included, relevant | Minimal discussion | No discussion |
| Figures and Tables (2) | | Clear, incorporated in discussions, integrated | Adequate | Lacking |
| References (2) | | Well used | Some used | None used |

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Silver Bullets

- Cone of Experience/Learning
- Learning Styles
- Multiple Intelligences
- Students' Tech should be Teachers' Tech
- Millennials are Multitaskers
- Brain Games build Brain Power (neuroplasticity!)

Research, Not Rhetoric

(de Bruyckere, Kirschner, & Hulshof, 2015; Watson, Terry, & Doolittle, 2013)





Create Your Own Strategies

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

Give them the third-best to go with; the second-best comes too late, and the best never comes.

(also Arnold Wilkins

Final Thought



Learn.Design.Do.



Deep and Flexible Knowledge Course Embedded Assessment Instructional Assessment Strategies



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