Designing Integrative Learning Experiences



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Anticipation Guide

Directions: Agree or Disagree or Edit?

- What is most important in any learning situation is what the learner already knows and can do.
- Students are motivated when they have choices, when they can pursue their curiosities, and when they are free from assessments.

Overview

- 1. Introduction
- 2. Learning Principles
- 3. Learning Principles
- 4. Learning Strategies
- 5. Conclusion



Integrative Learning

- Connecting
- Reflecting
- Synthesizing
- Transferring



Learning & Principles

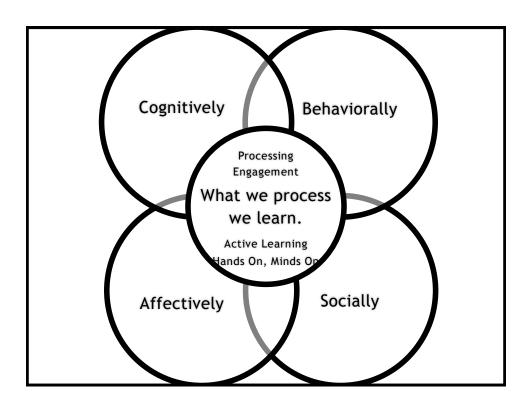


Fundamental Basis for Activities

words 🖙

What does the activity tell us?

- 1. Meaning is constructed during experience and reconstructed during recall.
- 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.



- 6 Principles for Developing Interdisciplinary Deep & 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 through developmental feedback
 - Learning embedded in prior knowledge & experience

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

Heuristic to Principles to Strategies



Peer-to-Peer Review/Critique/Feedback

• Peers provide feedback on each other's writings, drawings, artifacts, presentations, posters.



(Cho & McArthor, 2011; Kulkarni, 2015; Levi Altstaedter & Doolittle, 2014; Lundstrom & Baker, 2008; Nicol et al., 2013; Stacey et I., 2015)

Peer-to-Peer Review/Critique/Feedback

The findings show that producing feedback reviews engages students in multiple acts of evaluative judgment, both about the work of peers, and, through a reflective process, about their own work;

that it involves them in both invoking and applying criteria to explain those judgments; and that it shifts control of feedback processes into students' hands, a shift that can reduce their need for external feedback.

-- Nicol, Thompson, & Breslin, 2013

Peer-to-Peer Review/Critique/Feedback

Learning through practice at retrieval
Learning through varied tasks and purposes
Learning at the principle level
Learning awareness and control (metacognition)
Learning in response to developmental
feedback

Learning embedded in prior knowledge & experience

(Cho & McArthor, 2011; Kulkarni, 2015; Levi Altstaedter & Doolittle, 2014; Lundstrom & Baker, 2008; Nicol et al., 2013; Stacey et I., 2015)

25-Word Summaries

- 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.

Colleges provide instruction, but should produce learning. Students and teachers should co-produce knowledge. Coherent education creates flexible, adaptable, interesting people. This shift will change everything. [25 words]

The first two sentences of the summary do a nice job of addressing essential elements of the article; the second two sentences seem to lose the focus. The first sentence is an explicit central theme, while the second sentence is more implicit. Given that you have identified two themes in the two sentences, how could you combine the two sentences? Often combining such sentences will result in the use of fewer words and allow you to increase the interrelationship between the various ideas (thus increasing their meaning).

The third sentence isn't really a central focus. The authors focus on student learning more than creating interesting people. The final sentence is more descriptive; that said, if you have the words to spare, the idea seems important to the

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25-Word Summaries

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Poster Session

- Opportunity to select, research, organize, summarize, and communicate specific information.
- Produce a conference-style poster and present the poster (discussion) in a public poster session.
- The researching, organizing, summarizing, and communicating (processing) are more important than the poster (product).



Poster Session

Learning through practice at retrieval
Learning through varied tasks and purposes
Learning at the principle level
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(Cho & McArthor, 2011; Kulkarni, 2015; Levi Altstaedter & Doolittle, 2014; Lundstrom & Baker, 2008; Nicol et al., 2013; Stacey et I., 2015)

To be interdisciplinary, one must think integratively.



Designing Flexible Learning Experiences



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