Connecting the Dots:

A Framework for Developing Course-Base Critical Thinking Assessments

15^h Annual Assessment Conference Texas A&M University

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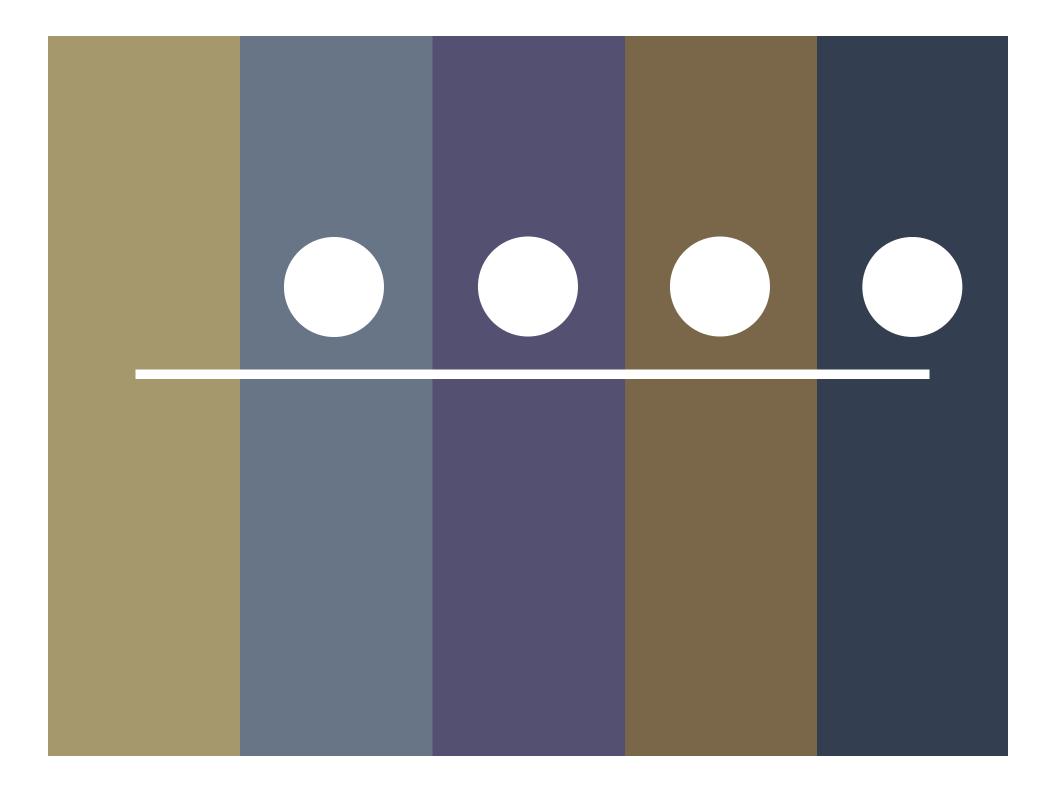
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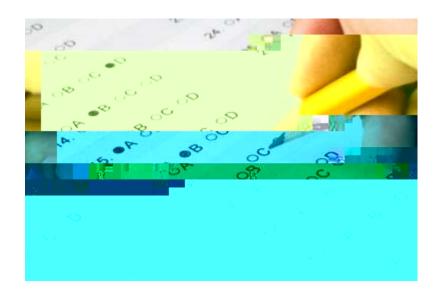
Teaching Critical Thinking



Understanding the Disconnect







Teaching Critical Thinking Assessing Factual Knowledge

Relevant Skills Evaluated by the

Evaluating Information

- Separate factual information from inferences.
- Evaluate evidence and identify inappropriate conclusions.

Creative Thinking

- Identify alternative interpretations for data or observations.
- Identify new information that might support or contradict a hypothesis.

Learning & Problem Solving

- Separate relevant from irrelevant information.
- Integrate information to solve problems.

Communication

CAT Features

One hour exam

Mostly short answer essay

Faculty scored in workshops

Detailed scoring guide

Benefits of Course-Based CT Assessmen

How you learn determines how you will be able to

use knowledge

SOLVING REAL WORL PROBLEMS Infusing critical thinking with discipline content prompt application

A scientist working at a government agency believes that an ingredient commonly used in bread causes criminal behavior. To support t	

Critical Thinking Skill Set 1

Determine how strongly information support an idea.

Provide alternative interpretations for information or observations that have several possible interpretation

Identify additional information or evidence needed to evaluate the alternative interpretations.

Patterns of Data

Historical Event

Literature

CAT App: Literature

"If We Must Die" by Claude McKaay is poem about having valor on the battlefield. The speaker is a militarynco ander rallying his troops before a big battle. This is evident by looking at the war-like language McKay uses throughout the poem, such as "letnosbly die," "we must meet the common foe," "our precious blood," and "dying, but fighting back."

- 1. To what extent do the quations provide support the student's interpretation of the poem?
- 2. Provide an alternative interpretation of McKay's use of warlike language.
- Identify 3 types of additional information that would help you investigate McKay's intent in writing the poem and explain why each source would be helpful.

J. Todd, Xavier University

Michelle recently moved to Milwauk [6] from Tallahassee, FL. Before moving, she bought a brand new Toyota Camry. On her way to work, Michelle noticed her tire pressure sensor light had come on. Michelle mentioned her tire problem to her co-worker Joe, who suggestated Michelle probably has a tire puncture. Joe recommends that Michelle her tires patched as soon as possible to address the issue.

- 1. How strongly does the informat provided support Joe's idea that Michelle's tires have leaks due to punctures?
- List two alternative explanations.
- 3. What additional information is needed to evaluate these explanations?

Want Your Daughter To Be A Science V Soccer Might Help

Is Comfort Food Causing Your Depress on?

Teaching to the Test

Test Teaching to Content Content Skills Apply to Teaching to Skills Many Disciplines

Motivating Faculty

- ✓ Establish a faculty teaching community to work together in the development of CAT Apps
- ✓ Provide small grants or incentives that provide resources for innovative practices

Opportunities for external funding and publication

Connecting the Dots

www.CriticalThinkingTest.org



