Designing Assessments for Higher-Order Thinking

Although higher-order thinking is often discussed broadly in the context of teaching, practicing educators have found it useful to distinguish students' ability to recall information from their ability to use knowledge in new situations (a process called transfer). When students use knowledge or transform it into something new, make decisions, or solve problems, they are more motivated to learn. "Higher-order thinking" is the term we use to describe these processes of transfer, critical thinking, and problem solving, when students use facts and concepts in different contexts from the ones they learned.

This course will show you how to design and carry out a range of assessments that involve higher-order thinking, whether for formative or summative purposes. You'll learn how to develop open-ended questions, conduct enriching discussions, and design brief and extended performance tasks all aimed at getting students to use higher-order thinking.

The final module focuses on the creation and use of appropriate rubrics to evaluate higher-order thinking, a key practice for keeping the focus on student learning outcomes rather than on mere activity completion.

Course Objectives

By the end of this course, you will be able to

Module 1

- Define assessment of higher-order thinking and distinguish it from assessment requiring only recall or comprehension.
- Analyze prepared examples of assessment questions and tasks and explain why they could (or could not) assess higher-order thinking.
- Analyze examples of assessment questions and tasks in your own teaching and determine whether these assess higher-order thinking.

Module 2

- Explain the rationale for using open-ended questions in classroom lessons.

- Write and analyze open-ended questions in your content/grade level area.
- Implement a strategy for using open-ended questions in classroom lessons and evaluate its effectiveness.

Module 3

- Determine the appropriate level of thinking required for constructed-response assessment questions.
- Analyze prepared constructed-response assessment questions and revise them to match the intended level of thinking.
- Create and evaluate constructed-response test questions in your content/grade level area.

Module 4

- Determine the appropriate level of thinking required for performance tasks.
- Analyze prepared performance tasks and revise them to match the intended level of thinking.
- Create and evaluate a brief performance task in your content/grade level area.

Module 5

- Determine the appropriate level of thinking for extended performance tasks.
- Analyze prepared extended performance tasks and revise them to match the intended level of thinking.
- Create and analyze an extended performance task in your content/grade level area.

Module 6

- Understand and explain the characteristics of effective rubrics.
- Evaluate the quality of a rubric.
- Create a rubric for a performance assessment in your content/grade level area.

Course Syllabus

Module 1	**What Is Higher-Order Thinking?** • Reading 1: Assessing Higher-Order Thinking: Five Ws and an H • Reading 2: How to Assess Higher-Order Thinking Skills • Video: Key Concepts in Using Higher-Order Questions • Check for Understanding • Application 1: What Questions and Tasks Promote Higher-Order Thinking? • Application 2: In Your Own Practice: Analyzing for Higher-Order Thinking • Module Journal
Module 2	**Asking Questions for Higher-Order Thinking** • Reading 1: Enriching Classroom Discourse: Planning for and Asking Strategic Questions • Reading 2: *EL*—What is the Value of Life? and Other Socratic Questions • Video: Higher-Order Questions: A Path to Deeper Learning • Check for Understanding • Application 1: Writing Open-Ended Questions • Application 2: In Your Own Practice: Implementing an Oral Discussion • Module Journal
Module 3	**Writing Constructed-Response Assessment Questions** • Reading 1: Open-Ended Questions • Reading 2: Specific Strategies for Assessing Higher-Order Thinking • Reading: *EL*—Beyond One Right Answer • Media: How to Present Constructed-Response Test Questions • Check for Understanding • Application 1: Revising Questions to Match Intended Thinking Level • Application 2: In Your Own Practice: Using Constructed-Response Test Questions • Module Journal

Module 4	**Designing Brief Performance Tasks** • Reading 1: Assessing Analysis, Evaluation, and Creation • Reading 2: Performance Assessment Tasks: The Basics • Video: Formative Assessment: Tools and Techniques • Check for Understanding • Application 1: Revising Brief Performance Tasks to Include Higher-Order Thinking • Application 2: In Your Own Practice: Writing a Brief Performance Task • Module Journal
Module 5	**Designing Extended Performance Tasks** • Reading 1: Performance Assessment Tasks: Varying the Amount of Structure • Reading 2: Performance Assessment Tasks: Controlling Cognitive Level and Difficulty • Video: Student Profile: Portfolio Defense • Check for Understanding • Application 1: Revising Extended Performance Tasks to Require the Intended Thinking Level • Application 2: In Your Own Practice: Writing an Extended Performance Task • Module Journal
Module 6	**Writing Rubrics to Assess Higher-Order Thinking** • Reading 1: What Are Rubrics and Why Are They Important? • Reading 2: Common Misconceptions About Rubrics • Reading 3: Writing or Selecting Effective Rubrics • Video: Using Checklists and Rubrics for Assessment • Check for Understanding • Application 1: Evaluating and Revising a Sample Rubric • Application 2: In Your Own Practice: Writing a Rubric for a Performance Assessment • Module Journal

Resources

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