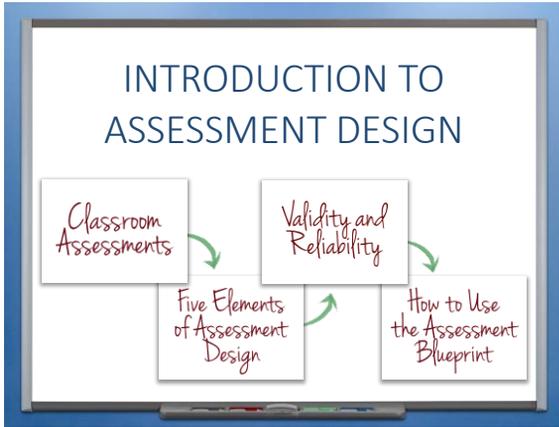
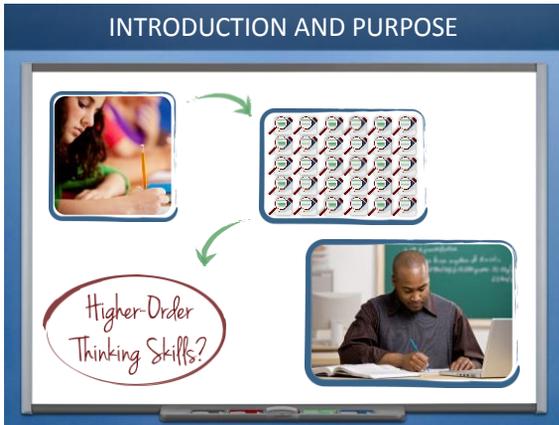
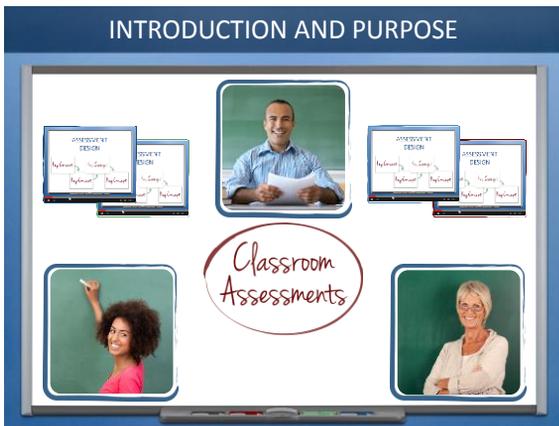


Introduction to Assessment Design







Introduction to Assessment Design

INTRODUCTION & PURPOSE

The whiteboard features the text "All Teachers" written in blue cursive, with "All" underlined in red. Below the text are two square photographs. The left photo shows a diverse group of children sitting on a blue mat in a classroom, some holding up their hands. The right photo shows a teacher in a yellow shirt interacting with students in a science lab setting.

INTRODUCTION AND PURPOSE

The whiteboard displays a circular flow diagram with four steps: "Learn the Basics of Assessment Design", "Practice Writing & Selecting Assessments", "Refine", and "Revisit Assumptions". Green arrows connect the steps in a clockwise cycle. Below the diagram are two square photographs of women. The left photo shows a woman with dark curly hair pointing at a green chalkboard. The right photo shows an older woman with short grey hair standing with her arms crossed.

INTRODUCTION AND PURPOSE

The whiteboard contains five square photographs of diverse individuals. The top row shows a woman in a white lab coat sitting at a desk and a man in a white shirt and tie sitting at a desk. The bottom row shows a woman with dark curly hair pointing at a green chalkboard, a man in a blue shirt holding papers, and an older woman with short grey hair standing with her arms crossed.

Introduction to Assessment Design

INTRODUCTION AND PURPOSE



Define **FIVE ELEMENTS OF ASSESSMENT DESIGN AND VALIDITY AND RELIABILITY**



Explain **WHY** teachers should focus on **FIVE ELEMENTS OF ASSESSMENT DESIGN**



Explain the purpose of the **ASSESSMENT BLUEPRINT** and the **ASSESSMENT BLUEPRINT EXAMPLE**

KEY CONCEPTS

Classroom Assessments

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

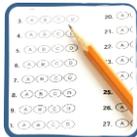
Validity and Reliability

How to Use the Assessment Blueprint



assessment

processes and tools that measure what students know and can do



Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

assessment
processes and tools that measure what students know and can do

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

assessment design
term that includes planning, writing and selecting assessments

Introduction to Assessment Design

KEY CONCEPTS

Five Elements
of Assessment
Design

Sources: Kansas State Department of Education, Assessment Literacy Project; Ohio Department of Education, "Assessment Literacy: Identifying and Developing Valid and Reliable Assessments" (2013); Relay Graduate School of Education, *Designing and Evaluating Assessments* (2014); and Rhode Island Department of Education, "Deeping Assessment Literacy."

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint



Sources: To create this list, we synthesized information from several sources: Kansas State Department of Education, Assessment Literacy Project; Ohio Department of Education, "Assessment Literacy: Identifying and Developing Valid and Reliable Assessments" (2013); Relay Graduate School of Education, *Designing and Evaluating Assessments* (2014); Rhode Island Department of Education, "Deeping Assessment Literacy."

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

An assessment that is **ALIGNED WITH STANDARDS** measures student performance against those standards



Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

An assessment has an **APPROPRIATE LEVEL OF RIGOR** if the assessment includes assessment items that match the level of rigor of the skill(s) you intend to measure *and* the assessment measures a range of student thinking and understanding so that it measures what all students know and can do

```
graph TD; Alignment((Alignment)) --> AD((Assessment Design)); Scoring((Scoring)) --> AD; Rigor((Rigor)) --> AD; Bias((Bias)) --> AD; Precision((Precision)) --> AD;
```

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

A **PRECISE** assessment measures students' knowledge and skills, not their misinterpretations or lack of unrelated background knowledge

```
graph TD; Alignment((Alignment)) --> AD((Assessment Design)); Scoring((Scoring)) --> AD; Rigor((Rigor)) --> AD; Bias((Bias)) --> AD; Precision((Precision)) --> AD;
```

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

An **UNBIASED** assessment measures students' knowledge and skills, not differences among groups of students because of their personal characteristics, such as race, gender, socioeconomic status or religion

```
graph TD; Alignment((Alignment)) --> AD((Assessment Design)); Scoring((Scoring)) --> AD; Rigor((Rigor)) --> AD; Bias((Bias)) --> AD; Precision((Precision)) --> AD;
```

Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

An assessment that has an **APPROPRIATE SCORING STRATEGY** measures students' knowledge and skills, not how or when the assessment is scored or who scores it

```
graph TD; Alignment((Alignment)) --> AD((Assessment Design)); Rigor((Rigor)) --> AD; Bias((Bias)) --> AD; Precision((Precision)) --> AD; Scoring((Scoring)) --> AD;
```

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

```
graph TD; Alignment((Alignment)) --> AD((Assessment Design)); Rigor((Rigor)) --> AD; Bias((Bias)) --> AD; Precision((Precision)) --> AD; Scoring((Scoring)) --> AD; VRel((Validity and Reliability));
```

KEY CONCEPTS

Validity and Reliability

Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

validity
the extent to which an assessment measures what you intend it to measure

reliability
the extent to which a student's score will be the same no matter when, where or in what form the student takes the assessment or who scores it

Sources: Kansas State Department of Education, Assessment Literacy Project; Ohio Department of Education, "Assessment Literacy: Identifying and Developing Valid and Reliable Assessments" (2013).

KEY CONCEPTS

Classroom Assessments

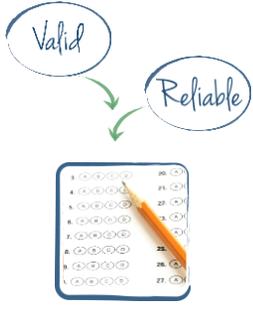
Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

Valid

Reliable



KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

Classroom Assessments

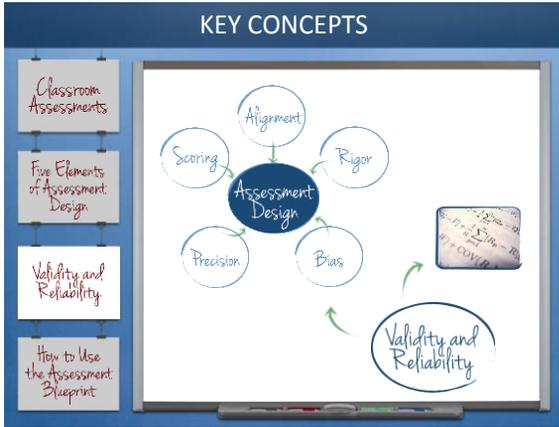
Assessment Design

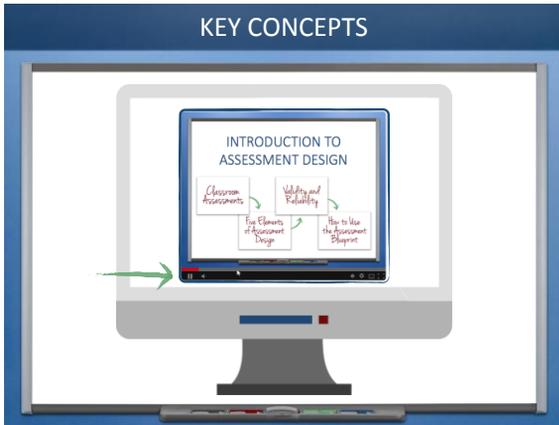
Valid

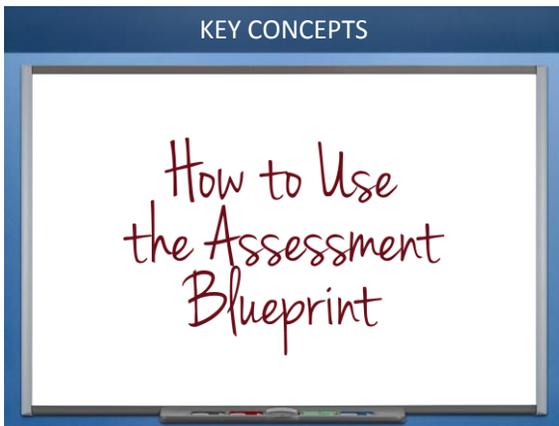
Reliable



Introduction to Assessment Design







Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

The whiteboard shows four 'ASSESSMENT DESIGN' diagrams at the top, each with a flow from 'The Course' to 'The Content' to 'The Change' to 'The Content' to 'The Course'. Below, 'Assessment Blueprint' is written next to a grid icon, and 'Assessment Blueprint Example' is written next to a table icon. Two green arrows point from the 'Assessment Blueprint' text to the 'Assessment Blueprint Example' table.

Item	Item	Item	Item	Item
Item 1				
Item 2				
Item 3				
Item 4				
Item 5				
Item 6				
Item 7				
Item 8				
Item 9				
Item 10				

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

The whiteboard shows a flow from 'Plan' in a blue oval to 'Build' in a blue oval, connected by a green arrow. Below, a blue house blueprint icon is connected to a colorful house icon by a green arrow.

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

The whiteboard shows a flow from 'Plan' in a blue oval to 'Write & Select' in a blue oval, connected by a green arrow. Below, a grid icon is connected to 'Classroom Assessments' in a red oval by a green arrow.

Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

Source: Adapted from Ohio Department of Education, "Assessment Literacy: Identifying and Developing Valid and Reliable Assessments" (2013).

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

1. Primary Purpose of the Assessment	2. Standard(s) (one per row)	3. Skill(s) (one per row)	4. Level(s) of Rigor	5. Possible Type(s) of Items		
Reading Informational Text 1: Quote accurately from the text (explicitly and making inferences from the text).		Quote accurately from the text (explicitly and making inferences).	3	SR		
Reading Informational Text 2: Determine how an issue, text, topic or issue is developed and how they are supported by key details, corroborate the text.		Identify main ideas and how key details support them.				
Reading Informational Text 4: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.		Determine the meaning of new vocabulary words.				
Reading Informational Text 8: Analyze how an author uses words and sentences to support particular points in a text, identifying which reasons and evidence support which points(s).		Explain how the author uses evidence to support their her claims.				
Writing 1: Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		Write an opinion piece on texts. Support your point of view with evidence.				
6. Write and/or Select Assessment Items	Item #	Standard(s) and/or Skill(s)	Type of Item	Level(s) of Rigor	# of Points	% of Assessment
1		Determine the meaning of new vocabulary words.	SR-MC	3-3		
2		Quote accurately, identify main ideas and evidence the author uses evidence.	CR-Short Answer	3-4		
3		Write an opinion, and support your point of view.	PF-Essay	5	10	3%
TOTAL					10	100%

Source: Ohio Department of Education, "Ohio's New Learning Standards: English Language Standards" (2010); Student Achievement Partners, "Mini-assessment for Who was Marco Polo?" by Joan Holub and The Adventures of Marco Polo by Russell Freedman" (2014).

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

Introduction to Assessment Design

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

Standards → Classroom Assessments → Instruction

Source: Mooney, Michael, and Jason Stricker, Strategic Design for Student Achievement (2008).

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

1. Primary Purpose of the Assessment	2. Standard(s) (one per row)	3. Skill(s) (one per row)	4. Level(s) of Rigor	5. Possible Type(s) of Items	
Reading Test 1: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade's topic or subject area.	RI-MC	RI-MC	1-2	SR	
Reading Informational Test 2: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade's topic or subject area.	RI-MC	RI-MC	2	SR	
Reading Informational Test 3: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade's topic or subject area.	RI-MC	RI-MC	2	SR	
Writing 1: Write opinion pieces on topics or texts, supporting a point of view with reasons and information.	W-MC	W-MC	5	CR, PT	
Writing 2: Write opinion pieces on topics or texts, supporting a point of view with reasons and information.	W-MC	W-MC	5	CR, PT	
6. Write and/or Select Assessment Items					
Item #	Standard(s) and/or Skill(s)	Type of Item	Level(s) of Rigor	# of Points	% of Assessment
1	Determine the meaning of new vocabulary words.	SR-MC	1-2	5	14
2	Quote accurately, identify main ideas and explain how the author uses evidence.	CR-Short Answer	1-4	13	34
3	Write an opinion, and support your point of view.	PT-Essay	5	18	51
TOTAL:				36	100%

Primary Purpose

Standards(s) Skills Level(s) of Rigor Type(s) of Items

Write and/or Select Assessment Items

KEY CONCEPTS

Classroom Assessments

Five Elements of Assessment Design

Validity and Reliability

How to Use the Assessment Blueprint

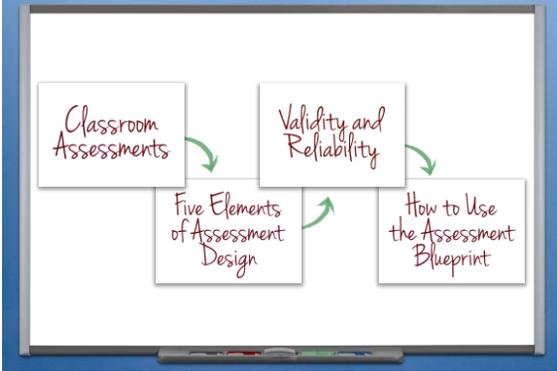
Assessment Design → Assessment Blueprint → Assessment Blueprint Example

Assessment Blueprint

Assessment Blueprint Example

Introduction to Assessment Design

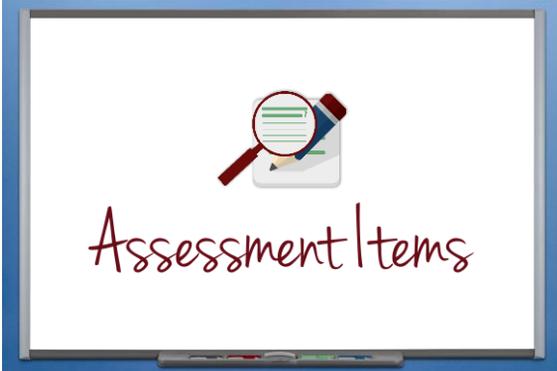
CHECK FOR UNDERSTANDING



CHECK FOR UNDERSTANDING

- Define **FIVE ELEMENTS OF ASSESSMENT DESIGN AND VALIDITY AND RELIABILITY**
- Explain **WHY** teachers should focus on **FIVE ELEMENTS OF ASSESSMENT DESIGN**
- Explain the purpose of the **ASSESSMENT BLUEPRINT** and the **ASSESSMENT BLUEPRINT EXAMPLE**

CHECK FOR UNDERSTANDING



Introduction to Assessment Design

CHECK FOR UNDERSTANDING



Assessment Item

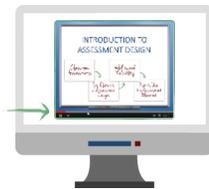
1. Discuss in one to three sentences why we recommend that you focus on five elements of assessment design as opposed to the statistical concepts associated with validity and reliability.

CHECK FOR UNDERSTANDING



Assessment Item

1. Discuss in one to three sentences why we recommend that you focus on five elements of assessment design as opposed to the statistical concepts associated with validity and reliability.



CHECK FOR UNDERSTANDING



Answer

1. Discuss in one to three sentences why we recommend that you focus on five elements of assessment design as opposed to the statistical concepts associated with validity and reliability.

Assessments that I use in my classroom do not demand the same level of statistical scrutiny as large-scale, standardized tests, but I can consider five elements of assessment design to ensure that my assessments are reasonably valid and reliable. Once I master how to address these five elements, I will be able to plan, write and select assessments that have an appropriate level of validity and reliability for use in my classroom.

Introduction to Assessment Design

CHECK FOR UNDERSTANDING



Assessment Item

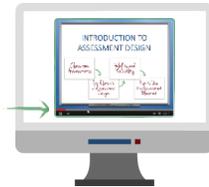
2. What are the assessment blueprint and assessment blueprint example, and how will you use them to understand the concepts in this series of modules and plan assessments in the future?

CHECK FOR UNDERSTANDING



Assessment Item

2. What are the assessment blueprint and assessment blueprint example, and how will you use them to understand the concepts in this series of modules and plan assessments in the future?



CHECK FOR UNDERSTANDING



Answer

2. What are the assessment blueprint and assessment blueprint example, and how will you use them to understand the concepts in this series of modules and plan assessments in the future?

The assessment blueprint and the assessment blueprint example are tools to help me organize the concepts in this series of modules. The assessment blueprint includes a table with directions and a blank template that I can repurpose to design my own assessments. The assessment blueprint example is the template filled out with an example. I can use the tools in my teaching practice to help me determine which standard or standards I plan to measure and design assessments to measure mastery of the standard or standards before I begin teaching.

Introduction to Assessment Design

