# Creating Achievement Items

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# Types of Items

- Multiple Choice
  - Single Select (MC-K)

**Willow Poem**
It is a willow when summer is over,
a willow by the river
from which no leaf has fallen nor
bitten by the sun
turned orange or crimson.
The leaves cling and grow paler,
swing and grow paler
over the swirling waters of the river
as if loath to let go,
they are so cool, so drunk with
the swirl of the wind and of the river
—
oblivious to winter,
the last to let go and fall
into the water and on the ground.

-William Carlos Williams

In the Public Domain

1. What is the poem about?

○ A willow tree whose leaves are changing color.

○ A willow tree that is the last to lose its leaves.

○ A willow tree fighting to survive.

○ A willow tree that is resisting a river.

# Types of Items

- Multiple Choice
  - Single Select (MC-K)
  - Multiple Select (MC-MS)

**Willow Poem**

It is a willow when summer is over,
a willow by the river
from which no leaf has fallen nor
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2. What is true about the willow tree? Select **two** answers.

☐ It is planted near a river.

☐ Its leaves can be orange or red.

☐ It stays brightly colored all year.

☐ Its leaves last a long time.

☐ It actively tries to resist winter.

# Types of Items

- Multiple Choice
  - Single Select (MC-K)
  - Multiple Select (MC-MS)
  - Multiple-Part (MC-MP)

**3.** This question has two parts. First, answer part A. Then, answer part B.

**Part A**

What is true about the willow tree?

- ○ Its leaves can be orange or red.
- ○ It stays brightly colored all year.
- ○ Its leaves last a long time.
- ○ It actively tries to resist winter.

**Part B**

What evidence from the poem **best** supports the answer in part A?

- ○ "bitten by the sun / turned orange or crimson."
- ○ "The leaves cling and grow paler, / swing and grow paler"
- ○ "over the swirling waters of the river / as if loath to let go,"
- ○ "oblivious to winter, / the last to let go and fall"

# Types of Items

- Multiple Choice
  - Single Select (MC-K)
  - Multiple Select (MC-MS)
  - Multiple-Part (MC-MP)
- Constructed Response (CR)
- Technology-enhanced (TE)
- Performance Tasks

# The Test Creation Process

- Initial Creation
  - Item Writer creates item set
  - Any sourced information needs to be cited
    - Appropriate, but also protective
  - Be wary of item "enemies"
- Initial Review(s)
  - First line of defense
  - Looking for things like sensibility of item, enemies, formatting, etc.
  - CETE had two sets
    - 2nd GRA and Content Lead
  - ELM has Content Lead review

# The Test Creation Process

- Editing Team Review
  - Much of the review of items happens here
  - More format review
  - Bias & Sensitivity Review
- Back to Content
  - Content reconciles the changes Editing has made
  - Accept/reject changes
- Entry and Final Review
  - Items entered into delivery engine
  - Final review

# The Test Creation Process

- Item Pilot & Performance Review
  - Items are placed in test alongside existing items in pool
  - Placed within test forms and are administered to students
- Three Fates at the End of the Road
  - Item performs well and is permanently added to the item pool
  - Item has questionable performance, and is further reviewed
    - The process repeats itself in this fate
  - Item has poor performance, is deemed irreparable, and is scrapped
- This is a constantly ongoing process for testing operations

# Anatomy of a Test Question

## Willow Poem

It is a willow when summer is over,
a willow by the river
from which no leaf has fallen nor
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**1.** What is the poem about?

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- ○ A willow tree fighting to survive.
- ○ A willow tree that is resisting a river.

# General Guidelines

▶ Choose the most appropriate type of item for the task you want test-takers to complete

▶ For non-literary content in items, be sure to cite the source

  ▶ Even if it is common and accepted knowledge

▶ Include items of all difficulty levels

  ▶ Content of items should drive difficulty of items

▶ Use the common name of items, not the brand name

▶ Avoid the use of the holidays in test questions

  ▶ Arbor Day and Groundhog Day were the exceptions at CETE

# Guidelines for Item Stems

- Stems should be complete questions
- Avoid the use of negatives in stems
- Avoid questions and prompts that evoke opinion over objectiveness

# Guidelines for Answer Choices

- Only one correct answer choice for multiple choice – single select items
- At least two correct answer choices for multiple choice – multiple select items
  - MS items should have at least 5 alternatives, but no more than nine
  - No more than half of the answer choices should be correct answers
- Test questions should not be answerable without reading a stimulus
- Answer choices should ideally be similar in length
- Keep answer choice options simple and distinct
- Don't use obvious right/wrong options

# Guideline for Answer Choices

▶ Logical ordering of answer choices is ideal

▶ Balance correct answer choices

▶ Mimic common errors test-takers would make

▶ Avoid

  ▶ All/None of the above, I don't know, etc. as options

  ▶ "Clueing" and "Enemies"

  ▶ Absolutes

# Guidelines for Answer Choices

3) Bandura's theory holds that some students who are innately capable sometimes do not learn because they lack this.

A) enactive learning
B) vicarious learning
C) self-efficacy
D) self-esteem

7) What kind of storage uses an online service that connects users with a distant computer server where users can store files?

A) Flash drive
B) Cloud computing
C) Hard drive
D) Digital video disc (DVD)

11) What is the condition that exists when there are discrepancies in digital access or digital educational opportunities among groups of people with different socioeconomic, race, or gender distributions?

A) digital media
B) digital literacy
C) digital divide
D) digital inequity

From a source associated with the textbook for one of my current classes (Roblyer, M. D., & Doering, A. H. (2006). *Integrating educational technology into teaching* (Vol. 2). Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.)

# Take A Break

- When we return, we'll put the Test Creation Process in action

# Test Development Activity

- Create Item Set (~20 minutes)
- Pass Sets to "Editing" (~20 minutes)
- Reconcile Changes (~20 minutes)