

QUALITY ITEMS – ASSESSMENT DESIGN CONSIDERATIONS



Selected-Response Items

Selected-response items ask students to select the correct answer from a list of options included in the item.¹ Examples of selected-response items include matching, true/false and multiple choice. We use answer keys and scoring guides to score these items.

Selected-response items offer several benefits.

- They are efficient.
- You can use selected-response items to assess a range of student knowledge and skills.
- You can score them faster than other types of items.

Selected-response items also come with challenges.

- Selected-response items cannot directly measure higher-order thinking in the same way that, for example, an essay prompt can.
- Students can guess the answers to selected-response items, which makes the results less accurate.
- A long assessment that contains only selected-response items can overwhelm and frustrate students.

How to Design Multiple-Choice Items²

A typical multiple-choice item contains four parts: an item number, background information, a prompt and choices. The choices include one correct answer and several incorrect answers, which are also known as distractors.

An *item number* orients students to where the item fits within the assessment. The best practice for this part is self-explanatory:

- Number each item.

Background information includes what students need to know to select the correct answer.

- Include all necessary information that students need in order to select the correct answer.

The *prompt* asks a question or describes a task.

- Frame prompts positively or emphasize negative key words. Just because a student can recognize an incorrect answer does not mean that he or she knows the correct answer. If you decide to use a negative prompt, be sure to emphasize the negative key words so that students are not confused.
- Ensure that prompts do not require that students know information not included in the prompt.
- Do not include words or grammatical cues that might give away the answer.
- Include words in the prompt that would otherwise be repeated in choices.

Choices include answers to the item prompt.

- Use the same number of choices on a single assessment so that students have the same odds of guessing the correct answer. We use four or five choices for most grades, though we can use as few as three choices for kindergarten and first grade. Four or five choices provide only a 20 or 25 percent chance of students guessing the correct answer *and* limits the number of good distractors you need to write.
- Use choices that are consistent in form, content and length.
- Order choices in a logical sequence.
- Include only one clearly correct answer, but make sure that your incorrect answers, “distractors,” are plausible. If distractors are too obvious, students may be able to guess the correct answer, whether or not they have mastered the content. Strong distractors should reflect common student misconceptions and errors so that if students answer items incorrectly, you can gain information about where and how student understanding breaks down.
- Avoid using “all of the above” or “none of the above.” Items with these two choices stand out and may appeal to students who can answer an item with four choices correctly if they know that two of the choices are right, although they may not have known that the third choice is right.

¹Kansas State Department of Education, “Assessment Literacy Project”; Ohio Department of Education, “How to Design and Select Quality Assessments”; Relay Graduate School of Education, *Designing and Evaluating Assessments* (2014); and Rhode Island Department of Education, “Deeping Assessment Literacy.”

²Relay Graduate School of Education, *Rules for Multiple Choice Item Design* (2013).

CONSTRUCTED-RESPONSE ITEMS

Constructed-Response Items

Constructed-response items ask students to write, or “construct,” the correct answer.¹ We use answer keys to score simpler constructed-response items, such as fill-in-the-blank items. We use scoring guides to score more complex constructed-response items, such as short- and long-answer items.



Constructed-response items offer some benefits that selected-response items do not.

- Constructed-response items are less susceptible to error from guessing because students have to generate an answer versus selecting it from a list of potential answers.
- It is easier to assess higher-order thinking skills with constructed-response items than it is with selected-response items.

Constructed-response items also come with challenges.

- Constructed-response items can take longer to score.

How to Design Constructed-Response Items²

A typical constructed-response item contains four parts: An item number, directions, a prompt and response space. Some constructed-response items also include a scoring guide.

An *item number* orients students to where the item fits within the assessment. The best practice for this part is self-explanatory:

- Number each item.

Directions provide students with instructions about how to answer the item.

- Include how long students have to answer the item.
- Include how many points the item is worth.

The *prompt* asks the question or describes the task.

- Make sure prompts are clear. If you use a vague prompt, you may not measure what you intend to measure.

Here’s an example of a vague prompt.

What does the term mammal mean? (3 points)

How might we make the prompt in this item clearer?

The original item leaves open the possibility of a wide variety of answers from students. We can make this prompt clearer by asking students what we want to know, which is whether they can list the characteristics of mammals. For example, a revised prompt might read:

Name three characteristics of mammals. (3 points)

1. _____
2. _____
3. _____

Finally, the *response space* should be adequate for students to record their answers.

1. A well-designed constructed-response item usually contains four parts: an item number, directions, a prompt and response space. It is good practice for the directions to include both _____ and _____.

2. Describe one benefit and one challenge of constructed-response items.

¹ Kansas State Department of Education, "Assessment Literacy Project"; Ohio Department of Education, "How to Design and Select Quality Assessments"; Relay Graduate School of Education, *Designing and Evaluating Assessments* (2014); and Rhode Island Department of Education, "Deeping Assessment Literacy."

² Relay Graduate School of Education, *Rules for Multiple Choice Item Design* (2013).