



When building MCQs and MultiAnswer assessments in most adaptive authoring tools, you typically will not need to worry about the order of answer choices.

The adaptive system will often randomize the order of the possible answers. There are usually options available to toggle this feature on or off.

What is a distractor?

A **distractor** is an alternate, but incorrect, answer in a multiple choice question (MCQ) or a MultiAnswer question.

MCQs and MultiAnswer question ask the student to identify the correct answer(s) from a prepopulated list.

The list must include 'wrong' answers, as well as the correct answer.



In the example on the right, notice how none of the correct answers are plausible.

Individuals cannot ride a cat or mushroom to work, making them nonsensical answers. While individuals can commute using planes, they do not qualify as an eco-friendly way to commute.

Each distractor would need to be revised to make this assessment a credible one.

Criteria for Good Distractors: Plausibility

Example: No Plausibility

Riding the _____ is an eco-friendly way to get to work.

- cat
- mushroom
- bus
- plane

Good distractors are reasonably plausible to fit with the question. The learner should not be able to guess the correct answer because none of the distractors are plausible.



Good distractors will have a similar structure to the correct answer, including a similar length. If the correct answer is much longer than the distractors, the learner is more likely to 'guess' the right answer because it has more detail.

If you cannot make all of the distractors have the same length, you should make at least one of the distractors the same length as the correct answer.

Criteria for Good Distractors: Similar Length

Example: Poor Length Consistency

What was the primary reason for the American Civil War?

- Financial difficulties.
- Political pressure to resubmit to English rule.
- The abolition of slavery led several states to declare secession from the Union, leading to a war where Union states fought to reunite the states.
- Disagreement over the import/export policies.

The example to the right illustrates an example of dissimilar distractor length. The correct answer is easily guessed because one of the examples is significantly longer than the others.



Good distractors will have a similar structure to the correct answer.

This enables learners to focus on the content, rather than the formation of the answer stems, to determine the correct answer.

Criteria for Good Distractors: Similar Structure

Example: Poor Answer Structure

Which of the following should be the first step in writing an essay?

- Making the reference list
- Creating an outline
- Making a list of key points
- Making the title page

All of the distractors are similar in structure to each other, but different from the correct answer. This makes the correct answer stick out because of structure, and the learner is more likely to guess the correct answer even if they do not know it.



Good distractors are an equivalent part of speech. This criteria overlaps with the previous one, as the part of speech is one of the elements of structure.

Some MCQs and MultiAnswers may ask the learner to complete a sentence, or will use a sentence fragment as the answer in another way. The distractors should fit grammatically into the assessment stem.

Criteria for Good Distractors: Equivalent Part of Speech

Example: Non-Equivalent Parts of Speech

Good architecture is _____ pleasing as well as structurally sound.

- aesthetically
- neutral
- purple
- jumping

This example illustrates bad examples of distractors, as they do not grammatically fit with the blank in the sentence. The correct answer is obvious because is the only one that completes the sentence in a grammatically correct manner.



Good distractors leverage common misconception because this helps target likely trouble areas where a student is more likely to have a misunderstanding.

When coupled with appropriate remediation, good distractors provide additional opportunity for instruction, specifically for the students who are struggling with those common misconceptions.

Criteria for Good Distractors: Common Misconceptions

Example: Using Common Misconceptions

Which of the following are examples of safe food handling techniques

- Store foods separately from each other to prevent cross-contamination.
- Always wear gloves, and change your gloves after handling raw meat.
- The only safe way to thaw meat is in the refrigerator.
- Beef must be cooked until well-done (160 degrees Fahrenheit) to be safe to eat.

This example illustrates **good** examples of distractors, as they illustrate common mistakes people make about food safety, such as that thawing meat in the refrigerator is the **only** way to safely do it.



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Good distractors test understanding and do not try to trick the student into picking a wrong choice.

Good distractors are plausible but still wrong. Some distractors may lead individuals down an incorrect line of thinking, but they should always be credibly incorrect, to ensure there is no learner debate over the correct answer.

Criteria for Good Distractors: Not a Trick

Example: Tricky Distractors

How many chromosomes are in a human cell?

- 9
- 18
- 23
- 46
- 52

In the example below, the student could actually pick several different answers that are technically correct. While the most correct answer is '46', all of the values below 46 are technically contained within 46, and therefore could be also considered correct.



Tricks sometimes come in the form of negatives. If you need to use a negative in the assessment stem, draw attention to the negative by setting it in bold font or italics, or something else that draws attention to the negative.

If it is possible to change the assessment to be positive, that is preferable.

Criteria for Good Distractors: Negative Phrasing

Example: Negative Phrasing

Which of the following months do NOT have 31 days?

- January
- February
- March
- April
- May

The example here is better than most negatively phrased assessments because the negative word is emphasized. *It would still be ideal to change this question to a positive though.*