

Open Professionals Education Network (OPEN) Resource Document
Writing Multiple-Choice Questions: All of the Above

Background

Instructors often use “All of the above” as an answer choice when writing multiple-choice questions but there are several reasons to avoid doing this. With four answer choices, where “All of the above” is the correct answer, a student only needs to know two of three are correct to be able to know that “All of the above” is the correct answer. Additionally, if “All of the above” is an answer choice but not the correct answer, then a student only needs to be able to eliminate one answer choice to also be able to eliminate the “All of the above” as an answer choice. These questions test partial knowledge and test-taking skills, making guessing easier for the savvy student (Gronlund, 1998). Also, authors tend to use “All of the above” when they want to ensure that the student knows a comprehensive list of items and therefore it is often the correct answer.

Check Your Understanding

Why should you avoid using “All of the above” as an answer choice in a multiple-choice question?

- A. When “All of the above” is the correct answer, a student only needs to have partial knowledge to be able to identify the correct answer.
- B. If “All of the above” is an answer choice but not the correct answer, students have to eliminate all other possible answer choices before being able to eliminate “All of the above.”
- C. “All of the above” is typically the incorrect answer when used as an answer choice.
- D. Using “All of the above” decreases the chances that students can correctly guess the answer.

Feedback

If you selected answer choice A, you are correct! One way to revise a question that uses “All of the above” each answer choice is to use various combinations from your original list of choices. The answer choices can contain incorrect options, correct but incomplete options, correct and incorrect options, and all correct options (for the right answer).

Examples

Original

Which of the following are measures of central tendency?

- A. Mean
- B. Median
- C. Mode
- D. All of the above ✓

Revised

Which of the following are measures of central tendency?

- A. range, percentile, median
- B. variance, skewness, kurtosis
- C. mean, median, mode ✓
- D. correlation, mean, standard deviation

Original

In a fully integrated software system, a patient summary page allows quick access to which of the following?

- A. medical images
- B. laboratory results
- C. patient order profile
- D. All of the above ✓

Revised

In a fully integrated software system, a patient summary page allows quick access to which of the following?

- A. medical images, laboratory results, prescriptions ordered
- B. laboratory results, patient order profile, appointments
- C. patient order profile, prescriptions ordered, medical images
- D. medical images, laboratory results, patient order profile ✓

Summary & Additional Resources

Note that when one of a list of items included in an answer choice is incorrect, a student can typically eliminate other answer choices that also contain that item be able to guess. This is one of the drawbacks of converting what is best represented as a check-all-that-apply item into a multiple-choice question. If you are limited to using a multiple-choice format, use these suggestions to avoid using "all of the above."

Reference:

Gronlund, N. E. (1998). *Assessment of student achievement*, (6th ed). Boston, MA: Allyn and Bacon.

Additional Resources:

Waugh, C. K. & Gronlund, N. E. (2013). *Assessment of student achievement* (10th ed.). Upper Saddle River, NJ: Pearson



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