

Open Professionals Education Network (OPEN) Resource Document

Writing Multiple-Choice Questions: Question Writing Tips

Background

Writing good multiple-choice questions can be challenging, particularly ones that ask students to do more than memorize facts and details. Here are a few simple hints to keep in mind when writing your multiple-choice questions.

Common pitfalls to avoid:

- Asking simple recall of information
- Providing unintended cues
- Using trick questions
- Using distractors that are obviously incorrect
- Using NOT or EXCEPT in the question
- Including *all of the above*, *none of the above*, or *only A and B* as option choices

Strategies used by the test savvy student – and how to combat them!

1. Pick the longest answer - make answer choices equal length.

2. When in doubt pick “C” - make sure the correct answer choice letter varies.
3. Never pick an answer which uses the word ‘always’ or ‘never’ in it - avoid using always and never in the answer choices.
4. If there are two answers which express opposites, pick one or the other and ignore other alternatives - sometimes offer opposites when neither is correct or offer two pairs of opposites.
5. Pick a word which you remember was related to the topic – include common student misconceptions in the answer choices.
6. When in doubt, guess - use five alternatives instead of three or four to reduce guessing.

Check Your Understanding

Directions: Read the following test question and then indicate the best change to make to improve the question.

Which one of the following types of learning outcomes is most difficult to evaluate objectively?

1. A concept.
2. An application.
3. An appreciation.
4. None of the above.

The best change to make in the previous question would be to:

- A. Change the question to incomplete-statement form.
- B. Use letters instead of numbers for each alternative.
- C. Replace “none of the above” with “an interpretation.”
- D. Remove the indefinite articles “a” and “an” from the alternatives.

Feedback

If you selected option C, you are correct! Using “None of the above” is one of the common pitfalls in writing multiple-choice questions that instructors should try to avoid.

Examples

Here are some general templates for how to write multiple-choice questions that address various learning outcome levels.

Low level

- Which of the following is an example of X? (choices include one or more used in the course)
- Identify the definition of X.

Middle level

- Which of the following is an example of X? (choices never seen in the course)
- Here is a scenario. Which of the following principles apply?

High level

- Which of the following solutions would be the best to apply in the scenario described below to solve the problem of X?
- Here is a problem. Identify which principle from this class could be used to solve it.
- Below are several arguments made against the statement X. Which is the most valid?

Here is an example multiple-choice question that attempts to measure a high level learning objective.

Judge the sentence in italics according to the criteria given below: *“The United States took part in the Gulf War against Iraq BECAUSE of the lack of civil liberties imposed on the Kurds by Saddam Hussein’s regime.”*

- A. The assertion and the reason are both correct, and the reason is valid.
 - B. The assertion and the reason are both correct, but the reason is invalid. ✓
 - C. The assertion is correct but the reason is incorrect.
 - D. The assertion is incorrect but the reason is correct.
 - E. Both the assertion and the reason are incorrect.
- (Carneson, Delpierre, & Masters, n.d.)

Summary & Additional Resources

Reference:

Carneson, J., Delpierre, G., & Masters, K. (n.d.). *Designing and managing multiple-choice questions: Appendix B, designing MCQs – do’s and don’ts*. Retrieved July 21, 2006 from the University of Cape Town Web site: <http://www.uct.ac.za/projects/cbe/mcqman/mcqappb.html>

Additional Resources:

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



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