

**"Making Multiple Choice Tests More Effective"**

**With**

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Handouts

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## ***Tips on Writing Good Multiple Choice Questions***

All the suggestions that follow stem from two basic precepts:

- I. Remove all barriers that will keep a knowledgeable student from getting the item right.
- II. Remove all clues that will help a less-than-knowledgeable student get the item right.

### **General Tips**

1. Plan your multiple choice test by first writing a list of the goals you want to assess and the number of items you want to write for each goal.
2. Keep each item as *short* and concise as possible. Avoid irrelevant material, digressions, and qualifying information unless you are specifically teaching the skill of identifying needed information. Don't repeat the same words over and over in the options; put them in the stem.
3. Define all terms carefully (e.g., largest in terms of area or population? What do you mean by sometimes, usually, or regularly?). Many terms are easily misinterpreted.
4. Don't make the vocabulary unnecessarily difficult.
5. Watch out for "interlocking" items, where a student can pick up the answer to one question from another.

### **Writing a Good Stem**

6. The stem should ask a complete question, even if it is phrased as an incomplete statement. The student shouldn't have to read the alternatives to determine the problem. Often such questions are really four or five true-false statements strung together.
7. The best items can be answered without reviewing all the options, as one must do in a "Which of the following" question.
8. Don't ask questions on trivia.
9. Don't ask questions that can be answered from common knowledge. Someone who hasn't studied the material shouldn't be able to answer the questions correctly.
10. Don't lift statements directly from the text. They will only measure simple recognition and recall and promote superficial learning.
11. Avoid negative items. If you must have them, underline and/or boldface **NOT** or **EXCEPT** and/or put it in all caps.
12. Avoid grammatical clues to the right answer by using expressions like "a/an", "is/are", or "cause(s)". Testwise students know grammatically incorrect options are wrong.

13. Avoid “specific determiners” like “always” or “never,” especially in true/false questions.

### Writing Good Options

14. Use capital letters, not lower case, to label options.

15. Avoid “None of these.” A student may correctly recognize wrong answers without knowing the right answer. Use this option only when it is important that the student know what *not* to do. If you use “none of these,” use it more than once, both as a correct answer and an incorrect answer.

16. Avoid “All of the above.” It requires the student to read every option. Some students may not be aware of this (or forget the directions); if they recognize Option A as correct, they will choose it without reading further. Others will recognize A and B as correct and recognize “All of the above” as correct even though they would not have recognized C.

17. You needn’t have the same number of options for every question. Some may have only 3, others 4 or 5.

18. Order responses logically; numerically if numbers, alphabetically if single words. If there is no logical order, insert the correct answer into the responses randomly.

19. Line up responses *vertically*. If your responses are so short that this seems to waste paper, arrange your test in two columns.

20. Make all alternatives roughly the same length. Testwise students know the longest option is often the properly-qualified, correct one.

21. Avoid interlocking options, in which the student can deduce the correct answer through the process of elimination.

22. Avoid repeated words or other verbal associations between the stem and the correct response. Testwise students will pick up this clue.

### The Special Problems of “Best Answer” Questions

23. Use this kind of question *only* when experts generally agree on what is best. If more than one option exists, specify that you mean “best” in one particular expert’s opinion (e.g., “According to Freud, what is the best way to..”). If neither of these situations apply, avoid using a best-answer question, since you are asking for an opinion and more than one answer may be easily justified. Avoid using “According to the textbook” or “According to your teacher”; if you need to use these qualifiers, you’re probably asking about a trivial point.

24. Underline and/or boldface **BEST** and/or put it in all caps.

25. Define in what sense you mean “best”: easiest, most useful, etc.

26. Never use “all of these” or “none of these,” since these answers make no sense in a best-answer situation. For the same reason, never use such answers as “A and C only” in best-answer problems.

### **Writing Good Distracters**

27. The best distracters help diagnose where each student went wrong in his or her thinking. Identify each task a student needs to do to answer a question correctly and create a distracter for the answer a student would arrive at if he completed each task correctly.
28. Use intrinsically true or at least plausible statements. Testwise students recognize ridiculous statements as wrong regardless of the stem.
29. Use common misconceptions or stereotypes.
30. Repeat key words from the stem or use other verbal associations between the stem and incorrect options. Testwise students think these are clues to the correct answer.

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